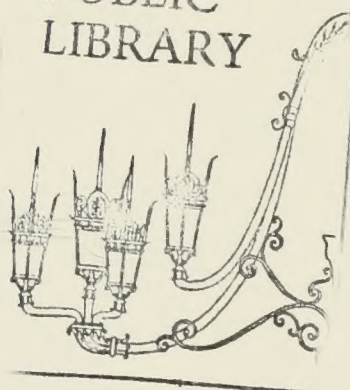


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Flour Milling Products

JANUARY 1977

U.S. Department of Commerce
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Issued March 1977
M20A(77)-1

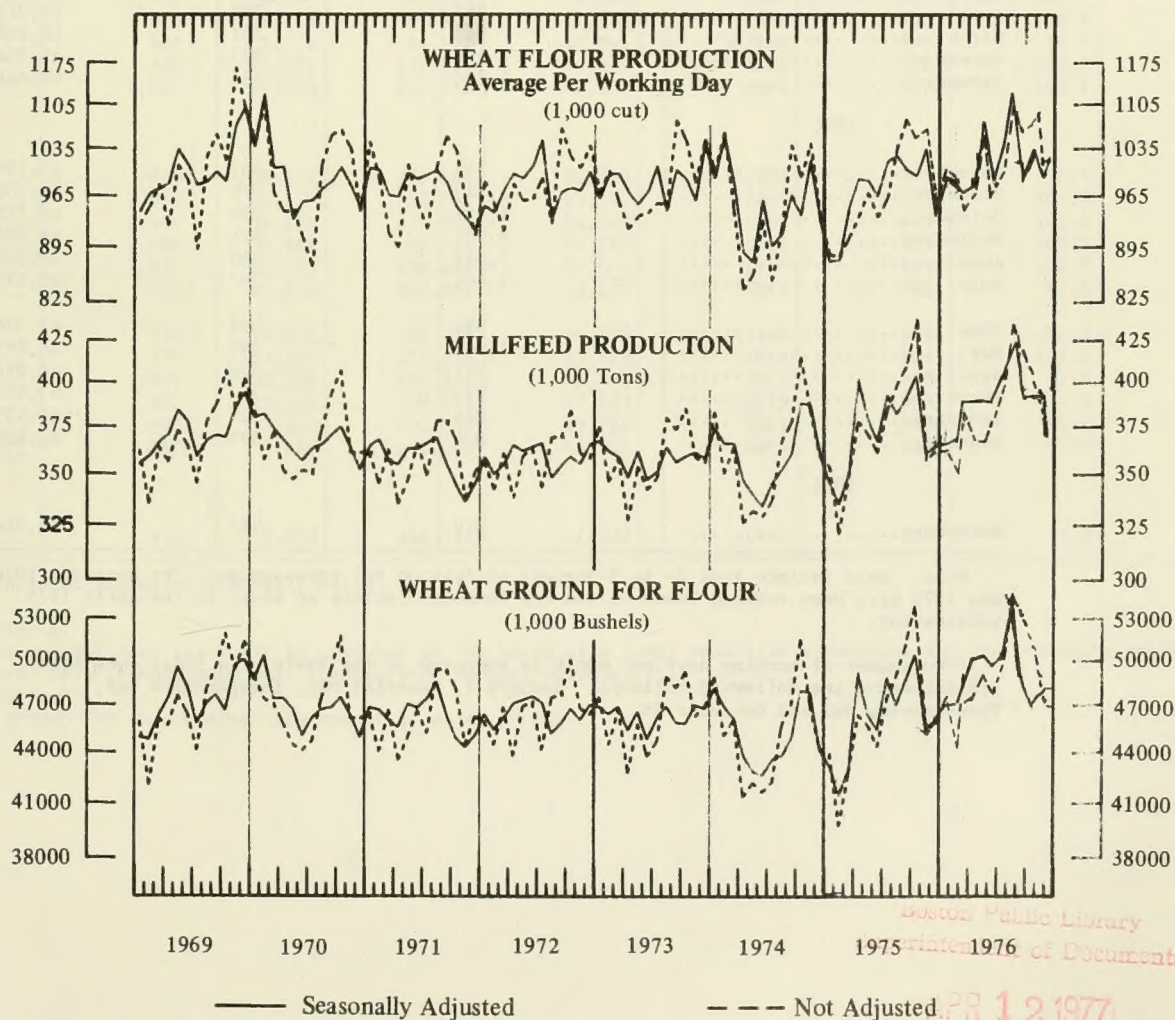
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Wheat Flour Milling, 1969—1976

Ratio Scales

Ratio Scales



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TABLE 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1974 TO 1977

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1977			
January.....	1,024	366	47,993
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	963	387	48,266
February.....	996	353	45,354
January.....	1,004	356	46,644
1975			
December.....	915	367	45,198
November.....	1,049	375	46,207
October.....	1,006	396	48,112
September.....	1,005	391	48,506
August.....	1,048	390	48,306
July.....	1,004	387	48,429
June.....	954	379	47,374
May.....	1,001	382	46,985
April.....	957	392	48,866
March.....	923	362	43,532
February.....	884	329	41,433
January.....	884	333	42,638
1974			
December.....	919	367	44,366

Note: Data include from 2- to 5-percent estimation for nonresponse. The data for 1974 and 1975 have been revised based on the new seasonal factors as shown in the April 1976 publication.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays; January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

TABLE 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1974 TO 1977

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1977								
January.....	1,022	21,467	383,963	48,569	(NA)	990	103.5	73.7
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.2
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3
1975								
December.....	933	20,532	368,047	46,000	3,907	991	94.1	74.4
November.....	1,059	20,113	359,798	45,241	(NA)	995	106.9	74.0
October.....	1,049	24,129	432,009	54,067	(NA)	995	105.4	74.4
September.....	1,080	22,681	409,197	51,162	4,140	995	108.5	74.0
August.....	1,034	21,705	398,052	49,017	(NA)	988	104.7	73.8
July.....	962	21,156	383,995	47,430	(NA)	988	97.4	74.3
June.....	935	19,631	361,216	44,375	4,434	988	94.6	73.7
May.....	970	20,361	371,310	45,718	(NA)	959	101.1	74.2
April.....	936	20,599	377,876	46,375	(NA)	959	97.6	74.0
March.....	907	19,054	349,068	42,833	4,755	959	94.6	74.1
February.....	883	17,653	320,553	39,746	(NA)	967	91.2	74.0
January.....	885	19,466	354,360	43,927	(NA)	967	91.5	73.9
1974								
December.....	936	19,658	358,722	44,272	3,885	967	96.8	74.0

Note: Data included estimates for small mills.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS AND CAPACITY

Product code	Description of item	Unit of measure	January 1977 (Quantity)	December 1976 (Quantity)	January 1976 (Quantity)
	Durum wheat (included in table 1 data):				
0011173	Durum wheat ground.....	M bu	3,228	2,917	3,063
2041153	Straight semolina durum flour.....	M cwt	1,448	1,304	1,306
2041155	Blended semolina durum flour.	do	(D)	(D)	(D)
	Rye:				
0011951	Rye ground for flour.....	M bu	308	^r 364	390
2041611	Rye flour production.....	M cwt	142	^r 171	181
2041618	Rye millfeed production.....	tons	1,773	^r 1,958	2,040
2041611	Rye flour stocks ¹	M cwt	(NA)	24	(NA)
	24 hour capacity ¹	do	10	10	9

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

^rRevised by 5 percent or more from previously published figures.

¹Collected quarterly.

TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

(1,000 cwt.)

Geographic area	Wheat ground for flour			Wheat ground for flour		
	January 1977 (Quantity consumed)	December 1976 (Quantity consumed)	January 1976 (Quantity consumed)	January 1977 (Quantity produced)	December 1976 (Quantity produced)	January 1976 (Quantity produced)
United States, total...	48,569	46,931	47,204	21,467	20,804	21,034
Middle Atlantic.....	5,264	6,026	5,741	2,352	2,704	2,530
New York.....	4,274	4,952	4,725	1,923	2,234	2,097
North Central.....	27,967	26,216	26,367	12,389	11,639	11,692
Ohio.....	2,837	2,869	3,015	1,235	1,242	1,315
Indiana.....	1,236	1,263	1,361	520	529	571
Illinois.....	2,963	2,791	2,689	1,297	1,224	1,187
Michigan.....	684	744	742	296	324	325
Minnesota.....	5,966	5,724	5,835	2,730	2,626	2,620
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,675	4,315	4,184	2,081	1,912	1,874
Nebraska.....	1,582	1,568	1,426	667	671	603
Kansas.....	6,147	5,164	5,316	2,737	2,322	2,406
South Atlantic.....	2,452	2,318	2,527	1,038	^r 983	1,153
East South Central.....	2,457	2,701	2,498	1,048	1,150	1,149
Tennessee.....	1,916	2,052	2,006	817	871	879
West South Central.....	3,260	2,796	2,749	1,422	1,229	1,222
Oklahoma.....	1,486	1,274	1,223	677	578	(D)
Texas.....	1,576	1,320	1,298	653	^r 558	560
Mountain.....	2,856	2,793	3,125	1,263	1,234	1,382
Montana.....	667	644	597	307	292	269
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,313	4,081	4,197	1,955	1,865	1,906
Washington.....	1,448	1,241	1,378	645	559	620
Oregon.....	836	749	890	364	334	403
California and Hawaii.....	2,029	2,091	1,929	946	972	883

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

^rRevised by 5 percent or more from previously published figures.

TABLE 4.--EXPORTS OF WHEAT FLOUR

(1,000 cwt.)

Country to which exported	December 1976	November 1976	12 months through December 1976
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110)			
Total.....	239	125	1,908
Guatemala.....	-	-	46
Colombia.....	7	22	124
Ecuador.....	-	3	13
Brazil.....	8	-	32
Israel.....	35	12	170
India.....	-	-	225
Pakistan.....	-	-	-
Sri Lanka (Ceylon).....	11	-	113
Philippine Republic.....	3	-	157
Morocco.....	28	39	554
Other.....	147	49	474
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120)			
Total.....	187	445	13,755
Nicaragua.....	-	1	18
Jamaica.....	13	21	163
Brazil.....	-	-	70
Iceland.....	4	12	101
Jordan.....	-	-	97
Saudi Arabia.....	83	241	4,718
Sri Lanka (Ceylon).....	-	-	2,198
Egypt.....	-	-	4,992
Philippine Republic.....	-	-	4
Korean Republic.....	-	-	20
Morocco.....	-	-	27
Other.....	87	170	1,347

Note: Data in this table are taken from Foreign Trade publication FT 410, U.S. Exports. The Schedule B codes are as follows: 0460110; wheat flour (except meal and groats); 0460120; wheat flour (wholly of U.S. wheat, except durum flour and semolina).

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey includes firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The current month's figures include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were made, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Beginning January 1975, the data were adjusted for the number of working days in the reporting period to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

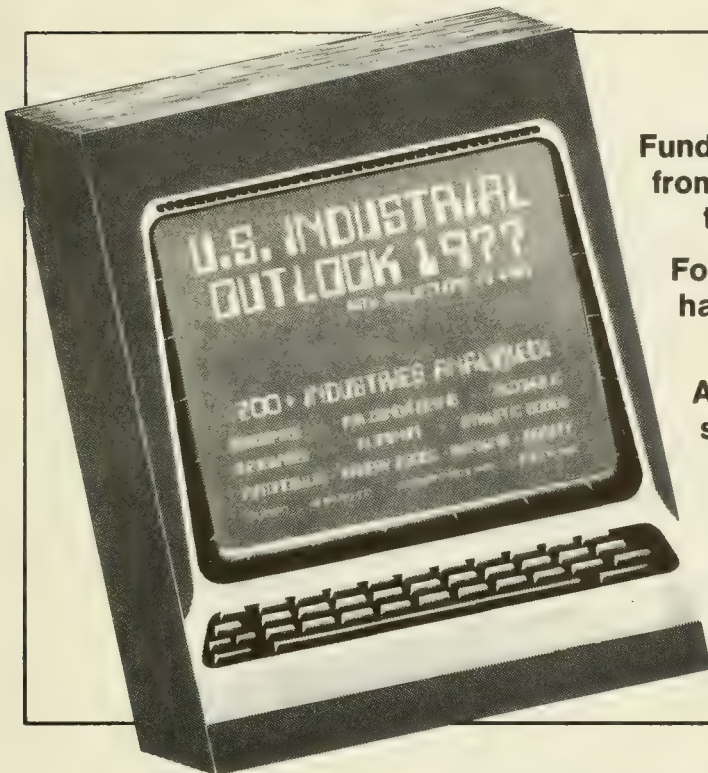
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Flour Milling Products

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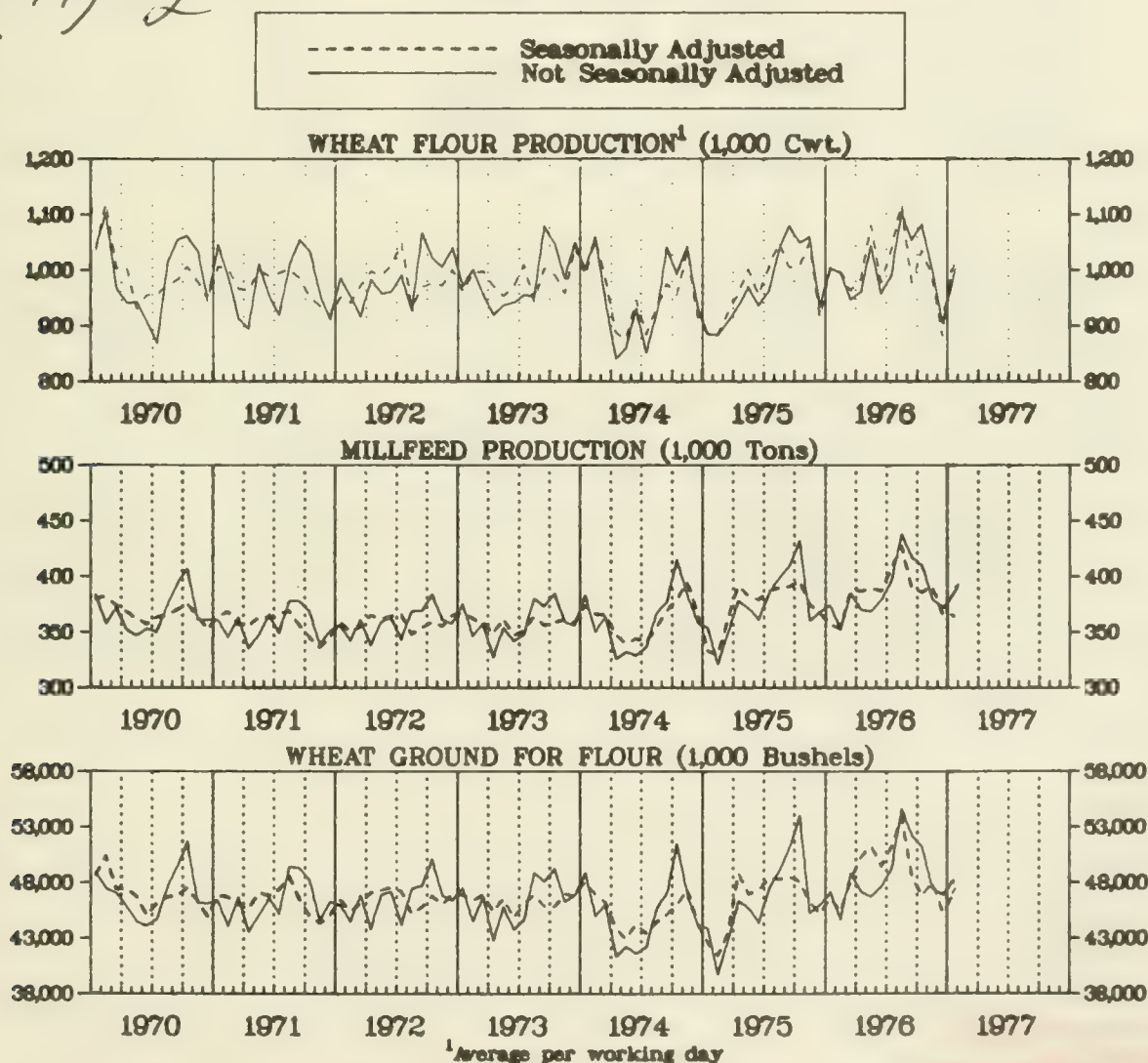
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WHEAT FLOUR MILLING: 1970 TO 1977

20 A(77)-2



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TABLE 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1977			
February.....	1,074	388	48,856
January.....	1,017	363	47,465
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
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February.....	884	329	41,433
January.....	884	333	42,638

Note: Data include from 2- to 5-percent estimation for nonresponse. The data for 1974 and 1975 have been revised based on the new seasonal factors as shown in the April 1976 publication.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays; January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

TABLE 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1977								
February.....	1,073	21,469	386,182	48,123	(NA)	990	109.1	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
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January.....	885	19,466	354,360	43,927	(NA)	967	91.5	73.9

Note: Data included estimates for small mills

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS AND CAPACITY

Product code	Description of item	Unit of measure	February 1977 (Quantity)	January 1977 (Quantity)	February 1976 (Quantity)
0011173	Durum wheat (included in table 1 data): Durum wheat ground.....	M bu	3,126	3,278	3,318
2041153	Straight semolina durum flour.....	M cwt	1,383	1,466	1,456
2041155	Blended semolina durum flour.	do	(D)	(D)	(D)
0011951	Rye: Rye ground for flour.....	M bu	302	305	308
2041611	Rye flour production.....	M cwt	130	140	142
2041618	Rye millfeed production.....	tons	1,410	1,751	1,645
2041611	Rye flour stocks ¹	M cwt	(NA)	(NA)	(NA)
	24 hour capacity ¹	do	10	10	9

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

^rRevised by 5 percent or more from previously published figures.

¹Collected quarterly.

TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

(1,000 cwt.)

Geographic area	Wheat ground for flour			Wheat ground for flour		
	February 1977 (Quantity consumed)	January 1977 (Quantity consumed)	February 1976 (Quantity consumed)	February 1977 (Quantity produced)	January 1977 (Quantity produced)	February 1976 (Quantity produced)
United States, total...	48,123	21,469	48,035	21,320	44,674	19,891
Middle Atlantic.....	5,523	2,488	5,218	2,334	5,571	2,467
New York.....	4,489	2,038	4,228	1,905	4,660	2,072
North Central.....	27,376	12,232	27,454	12,214	25,447	11,260
Ohio.....	2,515	1,081	^r 2,629	^r 1,141	2,800	1,225
Indiana.....	1,231	516	1,236	520	1,120	478
Illinois.....	3,078	1,353	2,963	1,297	2,806	1,237
Michigan.....	696	305	682	296	704	310
Minnesota.....	5,936	2,748	5,966	2,730	5,880	2,656
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,739	2,117	4,675	2,081	3,875	1,744
Nebraska.....	1,485	661	^r 1,324	^r 582	1,356	573
Kansas.....	5,789	2,607	6,102	2,741	5,225	2,300
South Atlantic.....	2,628	1,122	2,439	1,031	2,475	1,118
East South Central.....	2,516	1,073	2,457	1,048	2,456	1,125
Tennessee.....	1,933	823	1,916	817	1,986	868
West South Central.....	3,202	1,425	3,215	1,419	2,652	1,182
Oklahoma.....	1,467	666	1,486	677	1,127	(D)
Texas.....	1,497	649	1,531	650	1,331	579
Mountain.....	2,583	1,165	2,785	1,242	2,471	1,093
Montana.....	659	316	667	307	542	245
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,295	1,964	4,467	2,032	3,602	1,646
Washington.....	1,387	623	1,448	645	1,090	490
Oregon.....	886	402	^r 990	^r 441	682	310
California and Hawaii.....	2,022	939	2,029	946	1,830	846

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

^rRevised by 5 percent or more from previously published figures.

TABLE 4.--EXPORTS OF WHEAT FLOUR
(1,000 cwt.)

Country to which exported	January 1977	December 1976	1 month through January 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110)			
Total.....	168	239	168
Guatemala.....	26	-	26
Colombia.....	-	7	-
Ecuador.....	-	-	-
Brazil.....	-	8	-
Israel.....	10	35	10
India.....	13	-	13
Chile.....	20	-	20
Sri Lanka (Ceylon).....	20	11	20
Philippine Republic.....	-	3	-
Morocco.....	38	28	38
Other.....	41	147	41
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120)			
Total.....	1,216	187	1,216
Nicaragua.....	4	-	4
Jamaica.....	35	13	35
Brazil.....	-	-	-
Iceland.....	2	4	2
Jordan.....	63	-	63
Saudi Arabia.....	396	83	396
Sri Lanka.(Ceylon).....	169	-	169
Egypt.....	360	-	360
Philippine Republic.....	11	-	11
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	176	87	176

Note: Data in this table are taken from Foreign Trade publication FT 410, U.S. Exports. The Schedule B codes are as follows: 0460110; wheat flour (except meal and groats); 0460120; wheat flour (wholly of U.S. wheat, except durum flour and semolina).

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey includes firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

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Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were made, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Beginning January 1975, the data were adjusted for the number of working days in the reporting period to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving-average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the census also publishes reports on other related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Thomas Flood	(301) 763-2415
Foreign Trade publications	Paul Finn	(301) 763-5140
Bureau of Domestic Commerce	Rita Bacon	(202) 377-3813
To order a Census publication	Dorothy Dunham	(301) 763-7472
To order microfilm of Census publications	Theresa Allen	(301) 763-5042

UP-TO-DATE BUSINESS REPORTS



Current Reports on Retail Trade

***Weekly Retail Sales**—Estimates of weekly retail sales for the United States (including totals adjusted for seasonal variations and trading day differences) for selected major kind-of-business groups, including figures for the comparable weeks in the previous year. Issued each Thursday.

***Advance Monthly Retail Sales**—Advance estimates of monthly retail sales for the United States (including data adjusted for seasonal variations and trading day differences) are compiled by major kind-of-business groups about 10 days after the month covered.

***Monthly Retail Trade Report**—Data are given for the United States, current month, with comparisons for previous months on estimates of monthly retail sales by major kind-of-business groups and selected individual kinds of business; separate figures are shown, in more limited kind-of-business detail, for firms operating 11 or more retail stores. Summary sales data are presented for geographic regions and divisions, selected metropolitan statistical areas, and cities. Also included are national estimates of end-of-month accounts receivable balances outstanding for all retail stores and, separately, for firms operating 11 or more retail stores. Separate data are shown for charge accounts and installment accounts. National sales and accounts receivable estimates are shown adjusted for seasonal variations and trading day differences, as well as in unadjusted form. This report

also includes data on department store sales published separately in Monthly Department Store Sales for Selected Areas (see below).

***Annual Retail Trade Report**—Estimates of annual sales and purchases, and of year-end accounts receivable, balances and inventories held by retailers in the United States by major kind-of-business groups and selected individual kinds of business. Separate figures shown in more limited kind-of-business detail for firms operating 11 or more retail stores. Also shown are sales-inventory ratios and per capita sales by kind-of-business for the United States, by major kind-of-business groups. Per capita sales estimates are also shown in limited kind-of-business detail for geographic divisions, and for the larger States and standard metropolitan statistical areas.

Annual Subscription \$30.10
(Includes all retail reports listed above)

†Monthly Department Store Sales for Selected Areas—Monthly dollar sales volume and the percent change in sales compared with the previous month and the same month in the previous year; cumulative year-to-date comparisons with data for the previous year. The number of department stores in the current month is also shown. Data are collected in about 200 standard metropolitan statistical areas, cities, and other areas.

Annual subscription \$3.60

Selected Service Trades

†Monthly Selected Services Receipts—This report provides estimates of monthly receipts of six major groups of service businesses: hotels, motels,

tourist courts, trailer parks, and camps; personal services; business services; automotive services; miscellaneous repair services; and motion picture, amusement, and recreation services. Also included are receipts estimates for the following more detailed kinds of business categories: hotels, tourist courts, and motels; laundries, laundry services, and cleaning and dyeing plants; beauty shops; barber shops; advertising; advertising agencies; and automobile repair shops. Comparable data for previous months and for the same month in the previous year, plus percent changes are also shown. Data are shown both unadjusted and adjusted for seasonal variations and trading day differences but not for price changes.

Annual subscription \$3.60

Wholesale Trade

***Monthly Wholesale Trade Report**—This report includes estimated dollar sales, end-of-month inventories, and stock-sales ratios of merchant wholesalers, by kind of business for the current month, with comparisons for previous months. Dollar volume sales estimates are shown by geographic division in total and for durable and nondurable kind-of-business subtotals. Sales and inventory trends (percent changes) are shown by detailed kinds-of-business at the national level and for selected kinds-of-businesses by geographic division. Measures of sampling variability are given. United States data are shown adjusted for seasonal variations and in the case of sales, also for trading day differences.

Annual Subscription \$7.20

Other Business Reports

†Canned Food Report—This report is issued for five dates—January 1, April 1, June 1, July 1, and November 1—to show total stocks of wholesale distributors and canners, including warehouses of retail multiunit organizations, of selected canned food items. In the January 1 report, separate data are shown for the No. 10 can size as well as for warehouse stocks of retail multiunit organizations.

Annual subscription \$1.25

†Green Coffee Inventories and Roastings—This quarterly report provides estimates of green coffee inventories held by roasters, importers, and dealers, the quantity of green coffee roasted, and the amount roasted for soluble use, by quarters, for the current and previous 3 years. Also included are quarterly imports of green coffee.

Annual Subscription \$1.00

***Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.**

†Available from Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233.

Publications Order Forms furnishing additional information of the various reports listed here are available free of charge from the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233

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Flour Milling Products

MARCH 1977

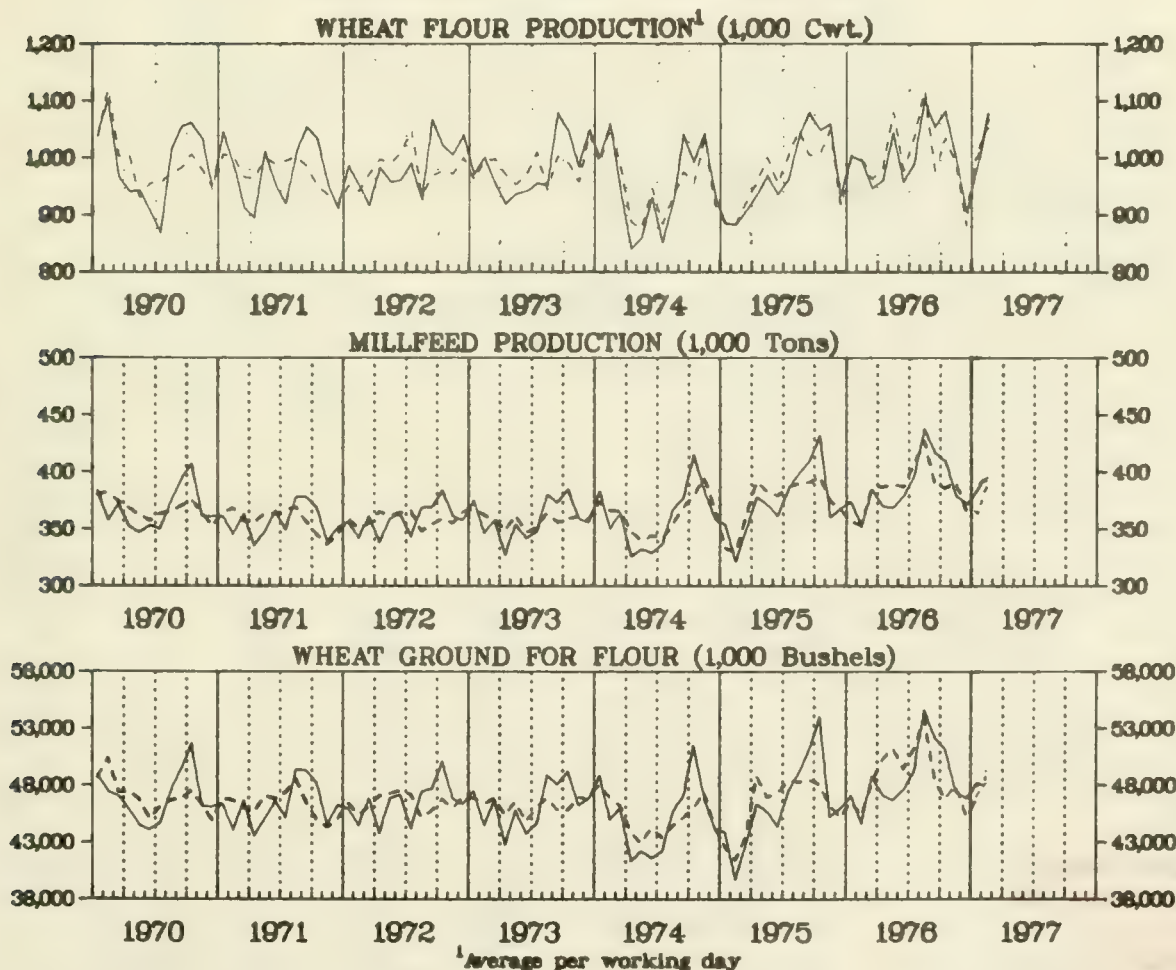
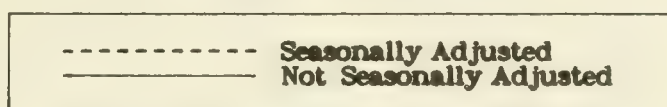
Issued April 1977
M20A(77)-3

M 20 A (77) - 3

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series and includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING: 1970 TO 1977



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Thomas Flood, (301) 763-2415.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

TABLE 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1977			
March.....	1,075	432	53,802
February.....	1,072	387	48,754
January.....	1,017	363	47,465
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	963	387	48,266
February.....	996	353	45,354
January.....	1,004	356	46,644
1975			
December.....	915	367	45,198
November.....	1,049	375	46,207
October.....	1,006	396	48,112
September.....	1,005	391	48,306
August.....	1,048	390	48,306
July.....	1,004	387	48,429
June.....	954	379	47,374
May.....	1,001	382	46,985
April.....	957	392	48,866
March.....	923	362	43,532
February.....	884	329	41,433

Note: Data include from 2- to 5-percent estimation for nonresponse. The data for 1974 and 1975 have been revised based on the new seasonal factors as shown in the April 1976 publication.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

TABLE 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

Not seasonally adjusted.

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1977								
March.....	1,057	24,322	429,727	54,448	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	NA	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	3,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	51,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.2
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3
1975								
December.....	933	20,532	368,047	46,000	3,907	991	94.1	74.4
November.....	1,059	20,113	359,798	45,241	(NA)	995	106.9	74.0
October.....	1,049	24,129	432,009	54,067	(NA)	995	105.4	74.4
September.....	1,080	22,681	409,197	51,162	4,140	995	108.5	74.5
August.....	1,034	21,705	398,052	49,017	NA	995	104.7	74.2
July.....	962	21,156	383,995	47,430	(NA)	995	97.4	74.3
June.....	935	19,631	361,216	44,375	4,434	995	94.6	73.7
May.....	970	20,361	371,310	45,718	(NA)	995	101.1	74.1
April.....	936	20,599	377,876	46,375	(NA)	995	97.6	74.0
March.....	907	19,054	344,000	42,833	4,755	995	94.6	74.0
February.....	883	17,653	320,557	39,747	NA	997	94.2	74.2

¹Data included estimates for small mills.

²Not available.

³Number of working days per month is computed on the basis of a 5-day week with allowance for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

⁴Collected quarterly.

⁵Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION,
MILL STOCKS AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	MARCH 1977	FEBRUARY 1977	MARCH 1976
			QUANTITY	QUANTITY	QUANTITY
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	3,694	^r 3,548	3,249
2041153	STRAIGHT SEMOLINA DURUM FLOUR	M CWT	1,688	^r 1,511	1,409
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR (1).	M BU	316	302	353
2041611	RYE FLOUR PRODUCTION (2)	M CWT	141	130	163
2041618	RYE MILLFEED PRODUCTION	TONS	1,692	1,410	1,939
2041611	RYE FLOUR STOCKS (3).	M CWT	29	(NA)	66
	24 HOUR CAPACITY (3).	DO	10	10	9

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Revised by 5 percent or more from previously published figures.

²The data for June 1976 should be revised to read "320".

³The data for June 1976 should be revised to read "150".

⁴Collected quarterly.

TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

GEOGRAPHIC AREA	MARCH 1977		FEBRUARY 1977		MARCH 1976	
	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)
UNITED STATES, TOTAL.	54,448	24,322	48,023	21,425	48,845	21,771
MIDDLE ATLANTIC.	6,831	3,090	5,523	2,488	6,108	2,703
NEW YORK.	5,738	2,610	4,489	2,038	5,019	2,240
NORTH CENTRAL.	30,323	13,538	27,288	12,194	27,698	12,300
OHIO.	3,306	1,437	2,515	1,081	3,107	1,355
INDIANA.	1,551	656	1,231	516	1,421	603
ILLINOIS.	3,243	1,418	3,078	1,353	3,099	1,375
MICHIGAN.	911	400	696	305	809	358
MINNESOTA.	6,420	2,958	5,936	2,748	6,015	2,702
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	5,117	2,291	4,739	2,117	4,198	1,899
NEBRASKA.	1,489	658	1,485	661	1,666	706
KANSAS.	6,375	2,869	5,789	2,607	5,534	2,486
SOUTH ATLANTIC.	2,999	1,278	2,626	1,121	2,540	1,134
EAST SOUTH CENTRAL.	2,915	1,267	2,516	1,073	2,657	1,222
TENNESSEE.	2,237	974	1,933	823	2,118	928
WEST SOUTH CENTRAL.	3,432	1,535	3,202	1,425	28,861	1,285
OKLAHOMA.	1,597	724	1,467	666	1,384	(D)
TEXAS.	1,535	674	1,497	649	1,317	570
MOUNTAIN.	3,010	1,351	2,583	1,165	2,768	1,225
MONTANA.	784	371	659	316	594	270
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	4,938	2,263	4,285	1,959	4,190	1,902
WASHINGTON.	1,646	743	1,387	623	1,292	581
OREGON.	1,004	451	876	397	783	346
CALIFORNIA AND HAWAII.	2,288	1,069	2,022	939	2,115	975

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

TABLE 4.--EXPORTS OF WHEAT FLOUR

(1,000 cwt.)

Country to which exported	February 1977	January 1977	2 months through February 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110)			
Total.....	209	168	378
Guatemala.....	3	26	29
Colombia.....	21	-	21
Ecuador.....	1	-	1
Brazil.....	5	-	5
Israel.....	-	10	10
India.....	1	13	14
Chile.....	38	20	57
Sri Lanka (Ceylon).....	-	20	20
Philippine Republic.....	-	-	-
Morocco.....	-	38	38
Other.....	140	41	183
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120)			
Total.....	2,333	1,216	3,549
Nicaragua.....	1	4	5
Jamaica.....	15	35	50
Brazil.....	-	-	-
Iceland.....	5	2	7
Jordan.....	-	63	63
Saudi Arabia.....	319	396	715
Sri Lanka (Ceylon).....	628	169	797
Egypt.....	1,296	360	1,656
Philippine Republic.....	-	11	11
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	69	176	245

Note: Data in this table are taken from Foreign Trade publication FT 410, U.S. Exports. The Schedule B codes are as follows: 0460110; wheat flour (except meal and groats); 0460120; wheat flour (wholly of U.S. wheat, except durum flour and semolina).

- Represents zero.

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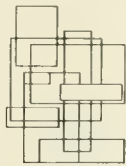
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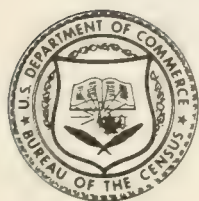
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3. 158:

Flour Milling Products



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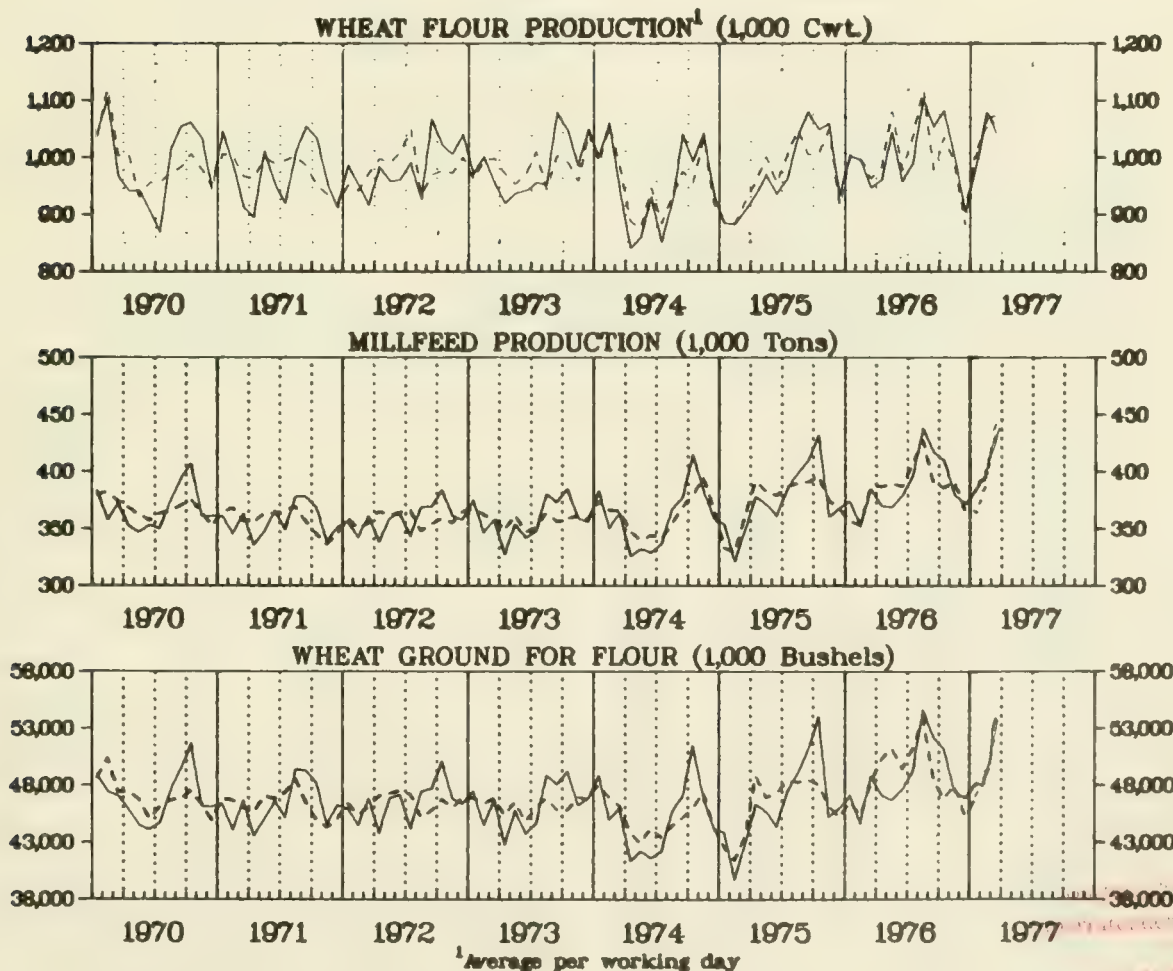
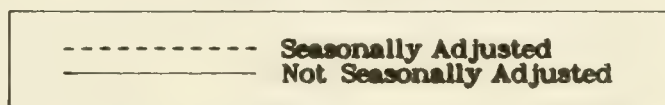
APRIL 1977

M20A(77)-4
Issued May 1977

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WHEAT FLOUR MILLING: 1970 TO 1977



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Thomas Flood, (301) 763-2415.

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TABLE 1A.--SUMMARY OF WHEAT FLOUR MILLING, 1975 TO 1977

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ 1,000 cwt	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1977			
April.....	1,005	387	53,789
March.....	1,075	387	48,774
February.....	1,072	387	47,465
January.....	1,017	363	
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	803	387	48,266
February.....	946	353	45,354
January.....	1,004	356	46,644
1975			
December.....	915	367	45,198
November.....	1,049	375	46,207
October.....	1,006	390	48,112
September.....	1,005	391	48,506
August.....	1,048	390	48,306
July.....	1,004	387	48,429
June.....	954	379	47,574
May.....	1,001	382	46,985
April.....	947	392	48,866

Note: Data include from 2- to 5-percent estimation for nonresponse. The data for 1974 and 1975 have been revised based on the new seasonal factors as shown in the April 1976 publication.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays; January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

TABLE 1B.--SUMMARY OF WHEAT FLOUR MILLING, 1975 TO 1977

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily flour mill capacity in wheat flour ³ (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ⁴ (percent)
	Average per working day ¹	Calendar month total						
1977								
April.....	982	20,612	369,719	46,382	(NA)	990	100.6	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	988	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	990	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	953	23,178	417,142	52,225	3,621	990	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.8
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,700	(NA)	990	104.7	74.0
April.....	960	21,113	369,972	47,192	(NA)	990	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.2
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3
1975								
December.....	933	20,532	368,047	46,000	3,907	991	94.1	74.4
November.....	1,039	20,113	359,798	45,241	(NA)	990	104.7	74.0
October.....	1,049	24,129	432,009	54,067	(NA)	990	105.4	74.4
September.....	1,080	22,681	409,197	51,162	4,140	993	108.5	74.0
August.....	1,034	21,705	398,052	49,017	(NA)	988	104.7	73.8
July.....	960	21,156	383,995	47,430	(NA)	988	97.4	74.0
June.....	935	19,631	361,216	44,375	4,434	988	94.0	73.7
May.....	970	20,361	371,310	45,718	(NA)	959	101.1	74.0
April.....	930	20,599	377,876	46,375	(NA)	959	97.0	74.0

Note: Data included estimates for small mills.

¹NA Not available.

²The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

³Collected quarterly.

⁴Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION,
MILL STOCKS AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	APRIL 1977	MARCH 1977	APRIL 1976
			QUANTITY	QUANTITY	QUANTITY
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	2,667	3,730	2,491
2041153	STRAIGHT SEMOLINA DURUM FLOUR	M CWT	1,134	1,632	1,062
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE: ¹				
0011951	RYE GROUND FOR FLOUR	M BU	282	316	333
2041611	RYE FLOUR PRODUCTION	M CWT	135	141	150
2041618	RYE MILLFEED PRODUCTION	TONS	1,413	1,690	1,820
2041611	RYE FLOUR STOCKS ²	M CWT	(NA)	29	(NA)
	24 HOUR CAPACITY ²	DO	10	10	9

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

¹1976 summary figures for rye should read:

Total, rye flour production..... 1,759 m. cwt.

Total, rye ground for flour..... 3,854 m. bu.

Rye flour extraction rate..... 81.5 percent

²Collected quarterly.

TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

GEOGRAPHIC AREA	APRIL 1977		MARCH 1977		APRIL 1976	
	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)
UNITED STATES, TOTAL.	46,382	20,612	54,434	24,321	47,192	21,113
MIDDLE ATLANTIC.	5,494	2,480	6,875	3,109	5,484	2,435
NEW YORK.	4,500	2,043	5,782	2,629	4,538	2,027
NORTH CENTRAL.	26,180	11,655	30,304	13,536	26,938	12,005
OHIO.	2,494	1,080	3,306	1,437	2,978	1,306
INDIANA.	1,328	556	1,472	626	1,186	504
ILLINOIS.	2,931	1,282	3,298	1,445	2,789	1,235
MICHIGAN.	768	336	907	398	739	328
MINNESOTA.	5,511	2,522	6,420	2,958	5,730	2,585
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,388	1,958	5,054	2,260	4,266	1,924
NEBRASKA.	1,274	566	1,493	660	1,467	621
KANSAS.	5,999	2,693	6,443	2,901	6,088	2,752
SOUTH ATLANTIC.	2,386	1,024	3,000	1,278	2,588	1,159
EAST SOUTH CENTRAL.	2,441	1,056	2,915	1,267	2,411	1,115
TENNESSEE.	1,866	808	2,237	974	1,918	843
WEST SOUTH CENTRAL.	2,956	1,270	3,369	1,506	3,074	1,372
OKLAHOMA.	1,437	655	1,597	724	1,499	(D)
TEXAS.	1,220	481	1,472	645	1,333	573
MOUNTAIN.	2,692	1,207	3,033	1,362	2,623	1,158
MONTANA.	633	300	784	371	590	267
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	4,233	1,920	4,938	2,263	4,074	1,869
WASHINGTON.	1,371	614	1,646	743	1,189	545
OREGON.	757	346	1,004	451	845	379
CALIFORNIA AND HAWAII.	2,105	960	2,288	1,069	2,040	945

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

TABLE 4.--EXPORTS OF WHEAT FLOUR

(1,000 cwt.)

Country to which exported	March 1977	February 1977	3 months through March 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110)			
Total.....	264	209	642
Guatemala.....	-	3	29
Colombia.....	1	21	23
Ecuador.....	-	1	1
Brazil.....	-	5	5
Israel.....	-	-	10
India.....	-	1	14
Chile.....	13	38	71
Sri Lanka (Ceylon).....	29	-	49
Philippine Republic.....	-	-	-
Morocco.....	88	-	126
Other.....	133	140	314
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120)			
Total.....	2,501	2,333	6,050
Nicaragua.....	1	1	6
Jamaica.....	52	15	102
Brazil.....	-	-	-
Iceland.....	12	5	19
Jordan.....	25	-	88
Saudi Arabia.....	245	319	961
Sri Lanka (Ceylon).....	1,033	628	1,830
Egypt.....	884	1,296	2,540
Philippine Republic.....	1	-	12
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	248	69	492

Note: Data in this table are taken from Foreign Trade publication FT 410, U.S. Exports. The Schedule B codes are as follows: 0460110; wheat flour (except meal and groats); 0460120; wheat flour (wholly of U.S. wheat, except durum flour and semolina).

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey includes firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The current month's figures include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 2-percent imputation rate are footnoted.

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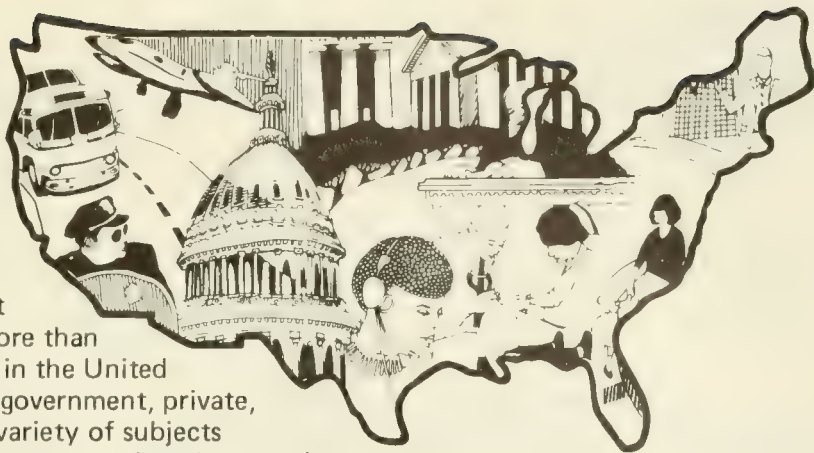
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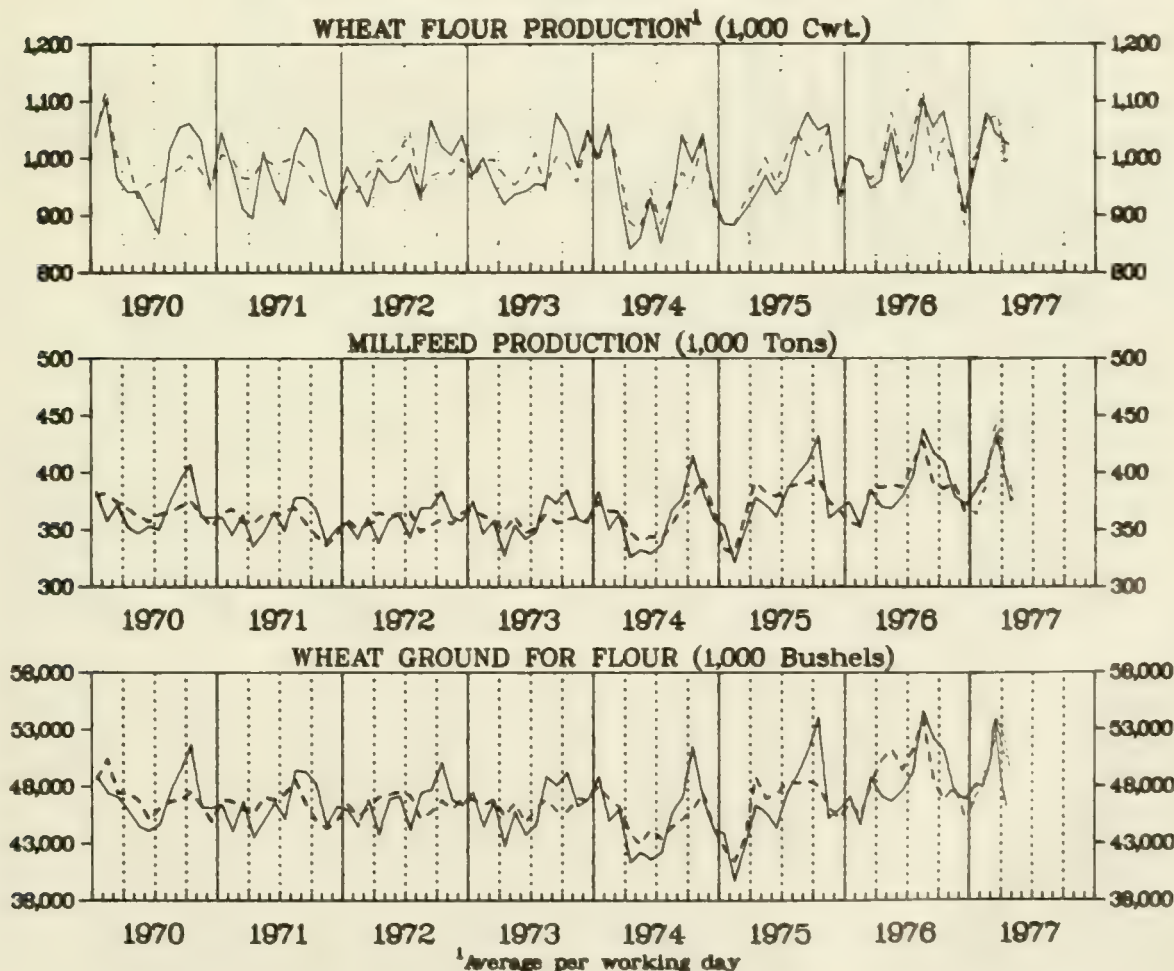
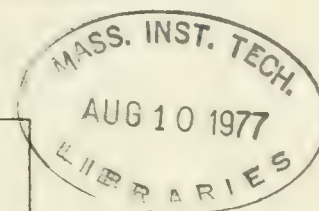
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WHEAT FLOUR MILLING: 1970 TO 1977

----- Seasonally Adjusted
———— Not Seasonally Adjusted



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TABLE 1A. SUMMARY OF WHEAT FLOUR MILLING 1975 to 1977

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat flour for flour (1,000 bushels)
1975			
May.....	1,033	398	47,333
April.....	1,005	387	49,469
March.....	1,075	333	53,789
February.....	1,072	387	47,333
January.....	1,017	363	47,465
1976			
December.....	885	370	45,697
November.....	990	391	45,697
October.....	1,035	386	46,773
September.....	978	389	48,536
August.....	1,119	356	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	384	51,287
April.....	983	387	50,311
March.....	963	387	48,266
February.....	996	353	47,333
January.....	1,004	356	47,333
1977			
December.....	915	370	45,198
November.....	1,049	375	46,207
October.....	1,006	396	48,112
September.....	1,001	391	48,506
August.....	1,048	390	48,306
July.....	1,004	387	48,429
June.....	978	379	47,374
May.....	1,001	382	46,985
April.....	957	384	48,866

Note: Data include from 2- to 5-percent estimation for nonresponse. The data for 1974 and 1975 have been revised based on the new seasonal factors as shown in the April 1976 publication.

¹ The number of working days per month is computed on the basis of 31-day months with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

TABLE 1B. SUMMARY OF WHEAT FLOUR MILLING 1975 to 1977

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily production capacity in wheat flour ³ (1,000 cwt.)	Wheat flour produced as percent of capacity	Extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1975								
May.....	997	20,942	377,476	47,151	(NA)	990	102.2	74.0
April.....	980	21,633	369,798	46,402	(NA)	998	100.7	74.1
March.....	1,057	24,321	430,120	48,034	4,248	998	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	998	108	74.4
January.....	1,015	21,300	380,203	48,035	(NA)	990	102	74.0
1976								
December.....	915	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	21,751	437,548	49,134	(NA)	998	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	998	100.1	73.6
June.....	978	21,059	378,582	47,645	3,923	998	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	998	96.3	74.4
March.....	947	21,771	384,578	48,845	4,510	998	96.7	74.4
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.4
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.4
1977								
December.....	913	20,113	368,047	46,000	3,907	991	94.1	74.4
November.....	1,059	20,113	359,798	45,241	(NA)	998	106.9	74.0
October.....	1,049	24,129	432,009	51,162	(NA)	995	105.4	74.4
September.....	1,080	22,681	409,197	51,162	4,140	995	108.5	74.0
August.....	1,034	21,705	398,052	49,017	(NA)	988	104.7	73.8
July.....	962	21,156	383,995	47,430	(NA)	988	104.7	74.3
June.....	978	19,631	361,216	44,375	4,434	988	92.6	74.4
May.....	978	20,361	361,313	44,375	(NA)	990	101.1	74.4
April.....	936	20,599	377,876	46,375	(NA)	990	97.6	74.4

Note: (NA) Not available.

¹ The number of working days per month is computed on the basis of 31-day months with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

² Collected quarterly.

³ Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION,
MILL STOCKS AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	MAY 1977 QUANTITY	APRIL 1977 QUANTITY	MAY 1976 QUANTITY
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	2,657	2,679	2,544
2041153	STRAIGHT SEMOLINA DURUM FLOUR	M CWT	1,118	1,131	1,062
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	272	282	251
2041611	RYE FLOUR PRODUCTION.	M CWT	126	135	113
2041618	RYE MILLFEED PRODUCTION	TONS	1,396	1,413	1,267
2041611	RYE FLOUR STOCKS (1).	M CWT	(NA)	(NA)	(NA)
	24 HOUR CAPACITY (1).	DO	10	10	8

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

GEOGRAPHIC AREA	MAY 1977		APRIL 1977		MAY 1976	
	QUANTITY WHEAT GROUND FOR FLOUR	QUANTITY WHEAT FLOUR PRODUC- TION	QUANTITY WHEAT GROUND FOR FLOUR	QUANTITY WHEAT FLOUR PRODUC- TION	QUANTITY WHEAT GROUND FOR FLOUR	QUANTITY WHEAT FLOUR PRODUC- TION
	(1,000 BUSHEL)	(1,000 CWT.)	(1,000 BUSHEL)	(1,000 CWT.)	(1,000 BUSHEL)	(1,000 CWT.)
UNITED STATES, TOTAL.	47,151	20,942	46,402	20,632	46,758	20,871
MIDDLE ATLANTIC.	6,025	2,704	5,494	2,480	6,027	2,679
NEW YORK.	4,895	2,211	4,500	2,043	4,983	2,226
NORTH CENTRAL.	25,998	11,540	26,203	11,678	26,311	11,706
OHIO.	2,708	1,169	2,494	1,080	2,207	950
INDIANA.	1,064	454	1,307	547	1,292	548
ILLINOIS.	3,238	1,414	2,913	1,279	2,865	1,275
MICHIGAN.	764	334	770	338	741	325
MINNESOTA.	5,329	2,428	5,568	2,546	5,595	2,527
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,415	1,960	4,388	1,958	4,424	1,989
NEBRASKA.	1,451	638	1,274	566	1,470	626
KANSAS.	5,378	2,413	6,002	2,702	6,046	2,731
SOUTH ATLANTIC.	2,780	1,188	2,392	1,030	2,525	1,162
EAST SOUTH CENTRAL.	2,573	1,119	2,441	1,056	2,518	1,103
TENNESSEE.	1,979	865	1,866	808	1,924	844
WEST SOUTH CENTRAL.	2,967	1,304	2,995	1,285	2,990	1,333
OKLAHOMA.	1,429	647	1,445	657	1,417	(D)
TEXAS.	1,284	540	1,251	494	1,361	586
MOUNTAIN.	2,615	1,173	2,688	1,205	2,570	1,139
MONTANA.	635	299	633	300	589	271
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	4,193	1,914	4,189	1,898	3,817	1,749
WASHINGTON.	1,234	560	1,371	614	1,128	515
OREGON.	724	318	713	324	714	319
CALIFORNIA AND HAWAII.	2,235	1,036	2,105	960	1,975	915

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosing figures for individual companies.

¹Revised by 5 percent or more from previously published figures.

TABLE 4.--EXPORTS OF WHEAT FLOUR

(1,000 cwt.)

Country to which exported	April 1977	March 1977	4 months through April 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110)			
Total.....	378	264	1,019
Guatemala.....	49	-	78
Colombia.....	-	1	23
Ecuador.....	-	-	1
Brazil.....	-	-	5
Israel.....	30	-	40
India.....	-	-	14
Chile.....	-	13	71
Sri Lanka (Ceylon).....	-	29	49
Philippine Republic.....	81	-	81
Morocco.....	110	88	236
Other.....	108	133	421
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120)			
Total.....	3,255	2,501	9,306
Nicaragua.....	6	1	12
Jamaica.....	17	52	119
Brazil.....	-	-	-
Iceland.....	4	12	23
Jordan.....	6	25	94
Saudi Arabia.....	689	245	1,650
Sri Lanka (Ceylon).....	298	1,033	2,129
Egypt.....	2,029	884	4,568
Philippine Republic.....	-	1	12
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	206	248	699

Note: Data in this table are taken from Foreign Trade publication FT 410, U.S. Exports. The Schedule B codes are as follows: 0460110; wheat flour (except meal and groats); 0460120; wheat flour (wholly of U.S. wheat, except durum flour and semolina).

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey includes firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The current month's figures include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were made, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Beginning January 1975, the data were adjusted for the number of working days in the reporting period to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, or 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving-average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the census also publishes reports on other related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

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Foreign Trade publications	Paul Finn	(301) 763-5140
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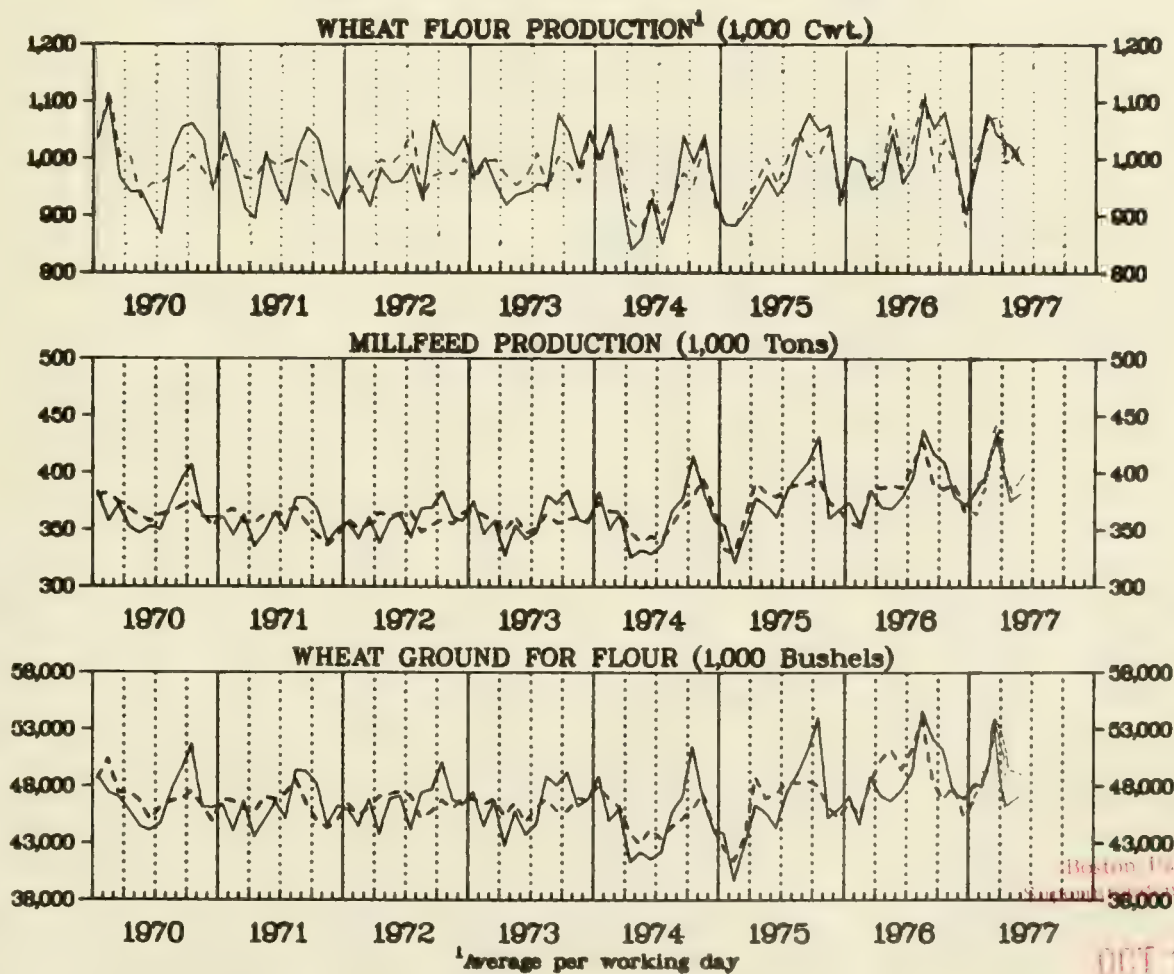
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BUREAU OF THE CENSUS

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series and includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING:
1970 TO 1977

----- Seasonally Adjusted
—— Not Seasonally Adjusted



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OCT 14 1977

TABLE 1A.--SUMMARY OF WHEAT FLOUR MILLING 1975 to 1977

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹	Millfeed production	Wheat flour for flour
	(1,000 cwt)	(1,000 tons)	(1,000 bushels)
1977			
June.....	951	374	47,966
May.....	1,027	398	49,079
April.....	1,005	387	49,469
March.....	1,075	433	53,789
February.....	1,072	387	48,754
January.....	1,017	363	47,465
1976			
December.....	885	370	47,497
November.....	990	391	48,063
October.....	1,035	388	46,773
September.....	977	389	48,536
August.....	1,119	427	53,773
July.....	1,035	407	51,218
June.....	978	387	49,471
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	963	387	48,266
February.....	996	355	45,354
January.....	1,004	356	46,644
1975			
December.....	915	367	45,140
November.....	1,049	375	46,207
October.....	1,006	396	48,112
September.....	1,005	391	48,501
August.....	1,048	390	48,306
July.....	1,004	387	48,829
June.....	954	379	47,374
May.....	1,001	382	46,985

Note: Data include from 2- to 5-percent estimation for nonresponse. The data for 1974 and 1975 have been revised based on the new seasonal factors as shown in the April 1976 publication.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

TABLE 1B.--SUMMARY OF WHEAT FLOUR MILLING 1975 to 1977

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ³ (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate (percent)
	Average per working day ¹	Calendar month total						
1977								
June.....	931	20,483	366,340	46,191	4,167	957	97.3	73.9
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
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September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	48,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
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January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3
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November.....	1,059	20,113	359,798	45,241	(NA)	995	106.9	74.2
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September.....	1,080	22,681	409,197	51,162	4,140	995	108.5	74.5
August.....	1,034	21,705	398,052	49,017	(NA)	988	104.7	73.8
July.....	962	21,156	383,995	47,430	(NA)	988	97.4	74.3
June.....	935	19,631	361,216	44,375	4,434	988	94.6	73.7
May.....	970	20,361	371,310	45,718	(NA)	989	101.1	74.2

Note: Data include estimates for small mills.

NA=Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	JUNE 1977 QUANTITY	MAY 1977 QUANTITY	JUNE 1976 QUANTITY
DURUM WHEAT (INCLUDED IN TABLE 1 DATA):					
0011173	DURUM WHEAT GROUND.	M BU	2,790	2,657	2,581
2041153	STRAIGHT SEMOLINA DURUM FLOUR	M CWT	1,222	1,125	1,143
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
RYE:					
0011951	RYE GROUND FOR FLOUR.	M BU	284	272	350
2041611	RYE FLOUR PRODUCTION.	M CWT	136	126	183
2041618	RYE MILLFEED PRODUCTION	TONS	1,442	1,396	1,933
2041611	RYE FLOUR STOCKS (1).	M CWT	21	(NA)	16
	24 HOUR CAPACITY (1).	DO	10	10	8

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

GEOGRAPHIC AREA	JUNE 1977		MAY 1977		JUNE 1976	
	QUANTITY WHEAT GROUND FOR FLOUR	QUANTITY WHEAT FLOUR PRODUC- TION	QUANTITY WHEAT GROUND FOR FLOUR	QUANTITY WHEAT FLOUR PRODUC- TION	QUANTITY WHEAT GROUND FOR FLOUR	QUANTITY WHEAT FLOUR PRODUC- TION
	(1,000 BUSHELS)	(1,000 CWT.)	(1,000 BUSHELS)	(1,000 CWT.)	(1,000 BUSHELS)	(1,000 CWT.)
UNITED STATES, TOTAL.	46,191	20,483	46,870	20,861	47,645	21,059
MIDDLE ATLANTIC.	6,100	2,733	6,014	2,702	6,153	2,731
NEW YORK.	5,119	2,305	4,895	2,211	5,131	2,287
NORTH CENTRAL.	25,297	11,190	25,773	11,450	26,661	11,772
OHIO.	2,490	1,058	2,708	1,169	2,726	1,187
INDIANA.	1,291	547	1,064	454	1,248	520
ILLINOIS.	2,975	1,295	3,053	1,338	2,964	1,295
MICHIGAN.	762	336	761	333	744	322
MINNESOTA.	5,715	2,602	5,329	2,428	5,681	2,554
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,200	1,866	4,415	1,960	4,304	1,923
NEBRASKA.	1,276	556	1,451	638	1,479	619
KANSAS.	5,071	2,268	5,341	2,400	5,846	2,621
SOUTH ATLANTIC.	2,683	1,137	2,781	1,189	2,447	1,066
EAST SOUTH CENTRAL.	2,601	1,123	2,573	1,119	2,591	1,127
TENNESSEE.	2,082	902	1,979	865	1,987	866
WEST SOUTH CENTRAL.	3,022	1,351	2,944	1,325	3,161	1,395
OKLAHOMA.	1,358	615	1,429	647	1,502	(D)
TEXAS.	1,408	620	1,261	561	1,375	580
MOUNTAIN.	2,564	1,153	2,592	1,162	2,878	1,247
MONTANA.	610	266	612	288	616	278
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	3,924	1,796	4,193	1,914	3,754	1,721
WASHINGTON.	1,165	526	1,234	560	1,123	511
OREGON.	692	310	724	318	704	315
CALIFORNIA AND HAWAII.	2,067	960	2,235	1,036	1,927	895

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosing figures for individual companies.

¹Revised by 5 percent or more from previously published figures.

TABLE 4.--EXPORTS OF WHEAT FLOUR

(1,000 cwt.)

Country to which exported	May 1977	April 1977	5 months through May 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110)			
Total.....	223	378	1,242
Egypt.....	93	37	236
Guatemala.....	-	49	78
Colombia.....	21	-	44
Ecuador.....	2	-	3
Brazil.....	-	-	5
Israel.....	7	30	47
India.....	3	-	17
Chile.....	18	-	89
Sri Lanka (Ceylon).....	-	-	49
Philippine Republic.....	24	81	105
Morocco.....	3	110	239
Other.....	52	71	330
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120)			
Total.....	1,842	3,255	11,147
Nicaragua.....	-	6	12
Jamaica.....	2	17	121
Brazil.....	-	-	-
Iceland.....	9	4	32
Jordan.....	16	6	110
Saudi Arabia.....	337	689	1,987
Sri Lanka (Ceylon).....	207	298	2,336
Egypt.....	1,076	2,029	5,645
Philippine Republic.....	-	-	12
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	195	206	892

Note: Data in this table are taken from Foreign Trade publication FT 410, U.S. Exports. The Schedule B codes are as follows: 0460110; wheat flour (except meal and groats); 0460120; wheat flour (wholly of U.S. wheat, except durum flour and semolina).

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey includes firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

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population of each country for 1975 as well as birth and death rates and the annual rate of growth for 1974 are shown. All benchmark data and projected estimates are annotated. Also included for each country are historical population series for the years 1950 to 1975. This report was prepared under a Resources Support Services Agreement with the Office of Population, Bureau for Population and Humanitarian Assistance, U.S. Agency for International Development.

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Flour Milling Products

JULY 1977

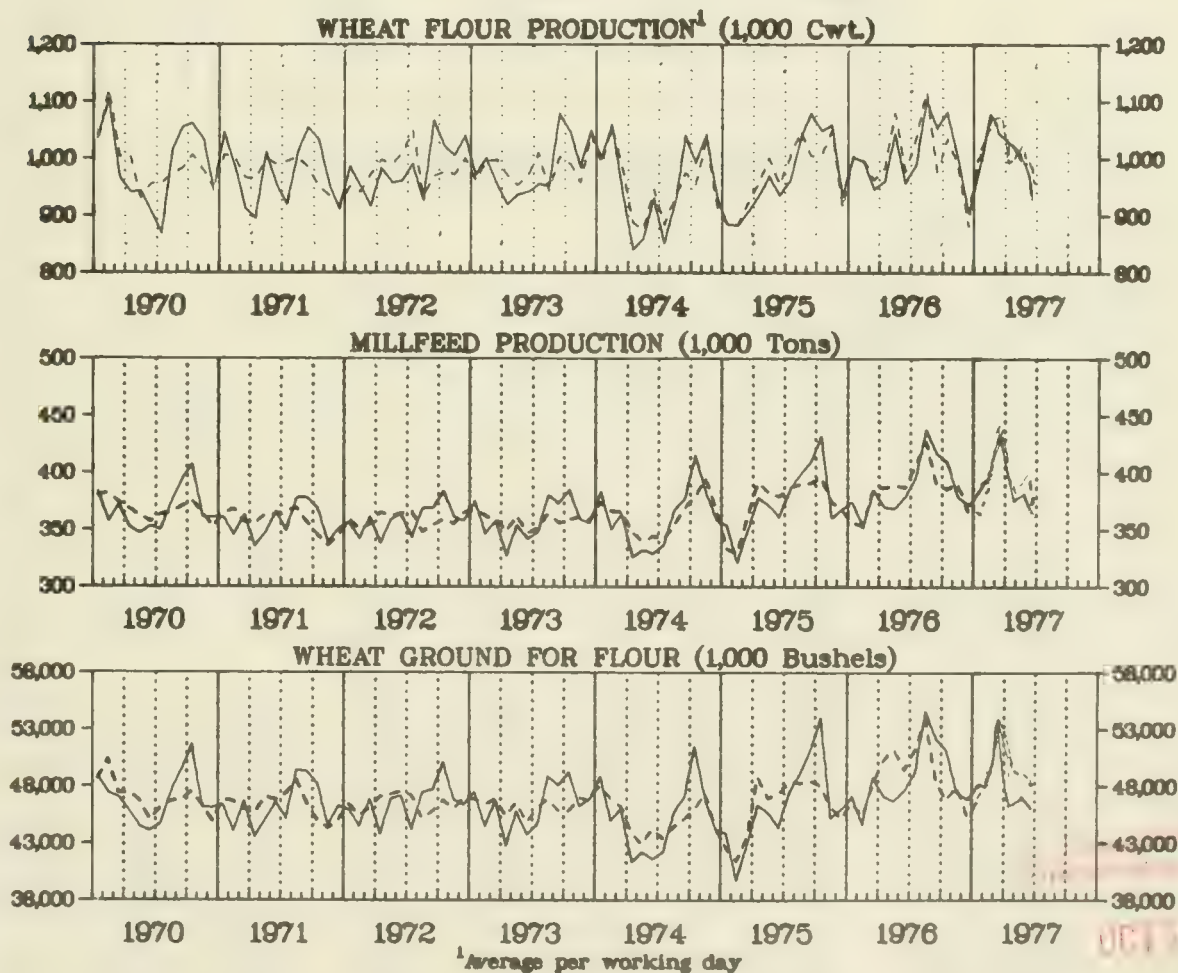
M20A(77)-7
Issued August 1977

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series and includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING: 1970 TO 1977

----- Seasonally Adjusted
———— Not Seasonally Adjusted



For address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Thomas Flood, (301) 763-2415.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

TABLE 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt)	Millfeed production (1,000 tons)	Wheat flour for flour (1,000 bushels)
1977			
July.....	967	355	45,240
June.....	453	374	48,038
May.....	1,027	398	49,079
April.....	1,005	387	49,469
March.....	1,075	433	53,789
February.....	1,072	387	48,754
January.....	1,017	363	47,465
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	963	387	48,266
February.....	996	353	45,354
January.....	1,004	356	46,644
1975			
December.....	915	367	45,198
November.....	1,049	375	46,207
October.....	1,006	396	48,112
September.....	1,005	391	48,506
August.....	1,048	390	48,306
July.....	1,004	387	48,429
June.....	954	379	47,374

Note: Data include from 2- to 5-percent estimation for nonresponse. The data for 1974 and 1975 have been revised based on the new seasonal factors as shown in the April 1976 publication.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

TABLE 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Not seasonally adjusted)								
Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1977								
July.....	924	19,401	344,953	43,521	(NA)	957	96.5	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.2
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3
1975								
December.....	933	20,532	368,047	46,000	3,907	991	94.1	74.4
November.....	1,059	20,113	359,798	45,241	(NA)	995	106.9	74.0
October.....	1,049	24,129	432,009	54,067	(NA)	995	105.4	74.4
September.....	1,080	22,681	409,197	51,162	4,140	995	108.5	74.0
August.....	1,034	21,705	398,052	49,017	(NA)	988	104.7	73.8
July.....	962	21,156	383,995	47,430	(NA)	988	97.4	74.3
June.....	935	19,631	361,216	44,375	4,434	988	94.6	73.7

Note: Data included estimates for small mills.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION,
MILL STOCKS AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	JULY 1977 QUANTITY	JUNE 1977 QUANTITY	JULY 1976 QUANTITY
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND	M BU	2,601	2,781	2,438
2041153	STRAIGHT SEMOLINA DURUM FLOUR	M CWT	1,147	1,245	1,043
2041155	BLENDED SEMOLINA DURUM FLOUR	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR	M BU	263	277	305
2041611	RYE FLOUR PRODUCTION	M CWT	126	131	137
2041618	RYE MILLFEED PRODUCTION	TONS	1,378	1,389	1,680
2041611	RYE FLOUR STOCKS (1)	M CWT	(NA)	21	399
	24 HOUR CAPACITY (1)	DO	10	10	8

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufactures, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

GEOGRAPHIC AREA	JULY 1977		JUNE 1977		JULY 1976	
	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.1)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)
UNITED STATES, TOTAL.	43,521	19,401	46,261	20,529	49,272	21,751
MIDDLE ATLANTIC.	5,628	2,525	6,194	2,781	6,053	2,678
NEW YORK.	4,775	2,153	5,213	2,353	5,224	2,321
NORTH CENTRAL.	24,065	10,725	25,324	11,204	27,825	12,266
OHIO.	2,631	1,124	2,474	1,052	3,034	1,312
INDIANA.	1,201	510	1,291	547	1,325	560
ILLINOIS.	2,666	1,158	2,975	1,295	2,699	1,154
MICHIGAN.	709	313	765	337	735	315
MINNESOTA.	5,466	2,516	5,715	2,602	5,584	2,514
IOWA.	(D)	(D)	(D)	(D)	(D)	365
MISSOURI.	3,989	1,763	4,189	1,862	4,604	2,043
NEBRASKA.	1,073	469	1,276	556	1,614	677
KANSAS.	4,876	2,224	5,068	2,265	6,625	2,964
SOUTH ATLANTIC.	2,371	1,009	2,667	1,134	2,623	1,143
EAST SOUTH CENTRAL.	2,385	1,033	2,628	1,136	2,551	1,102
TENNESSEE.	1,846	802	2,109	915	1,977	855
WEST SOUTH CENTRAL.	2,682	1,210	3,029	1,354	3,252	1,435
OKLAHOMA.	1,285	585	1,358	615	1,597	722
TEXAS.	1,263	565	1,413	622	1,417	607
MOUNTAIN.	2,628	1,177	2,564	1,153	2,929	1,298
MONTANA.	581	274	552	266	671	309
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	3,762	1,722	3,855	1,767	3,989	1,829
WASHINGTON.	1,131	512	1,096	497	1,312	591
OREGON.	662	295	692	310	660	293
CALIFORNIA AND HAWAII.	1,969	915	2,067	960	2,017	945

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(1,000 cwt.)

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Guatemala.....	-	-	78
Colombia.....	-	21	44
Ecuador.....	-	2	3
Brazil.....	-	-	5
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India.....	12	3	29
Chile.....	35	18	124
Sri Lanka (Ceylon).....	24	-	73
Philippine Republic.....	21	24	126
Morocco.....	37	3	276
Other.....	227	52	557
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120)			
Total.....	1,241	1,842	12,389
Nicaragua.....	3	-	15
Jamaica.....	15	2	135
Brazil.....	-	-	-
Iceland.....	15	9	47
Jordan.....	-	16	110
Saudi Arabia.....	559	337	2,546
Sri Lanka (Ceylon).....	452	207	2,787
Egypt.....	58	1,076	5,702
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Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	139	195	1,035

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- economics of waste heat recovery
- commercial options in waste heat recovery equipment
- instrumentation
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The *Waste Heat Management Guidebook* is part of the EPIC industrial energy management program aimed at helping industry and commerce adjust to the increased cost and shortage of energy.

TABLE 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt)	Millfeed production (1,000 tons)	Wheat flour for flour (1,000 bushels)
1977			
August.....	1,018	402	51,162
July.....	^F 1,015	355	45,237
June.....	953	374	48,038
May.....	1,027	398	49,079
April.....	1,005	387	49,469
March.....	1,075	433	53,789
February.....	1,072	387	48,754
January.....	1,017	363	47,465
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	963	387	48,266
February.....	996	353	45,354
January.....	1,004	356	46,644
1975			
December.....	915	367	45,198
November.....	1,049	375	46,207
October.....	1,006	396	48,112
September.....	1,005	391	48,506
August.....	1,048	390	48,306
July.....	1,004	387	48,429

Note: Data include from 2- to 5-percent estimation for nonresponse. The data for 1974 and 1975 have been revised based on the new seasonal factors as shown in the April 1976 publication.

^FRevised by 5 percent or more from previously published figures.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

TABLE 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production	Wheat ground for flour	Wheat flour mill stocks ²	Daily 24-hour capacity in wheat flour ²	Wheat flour produced as percent of capacity	Flour extraction rate ³
	Average per working day ¹	Calendar month total						
1977								
August.....	1,004	23,099	411,955	51,878	(NA)	957	104.9	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
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July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
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October.....	1,049	24,129	432,009	54,067	(NA)	995	105.4	74.4
September.....	1,080	22,681	409,197	51,162	4,140	995	108.5	74.0
August.....	1,034	21,705	398,052	49,017	(NA)	988	104.7	73.8
July.....	962	21,156	383,995	47,430	(NA)	988	97.4	74.3

Note: Data included estimates for small mills.

(NA) Not available. ^FRevised by 5 percent or more from previously published figures.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	AUGUST 1977 QUANTITY	JULY 1977 QUANTITY	AUGUST 1976 QUANTITY
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	3,319	2,601	3,186
2041153	STRAIGHT SEMOLINA DURUM FLOUR.	M CWT	1,442	1,147	1,329
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	328	263	322
2041611	RYE FLOUR PRODUCTION.	M CWT	151	125	144
2041618	RYE MILLFEED PRODUCTION.	TONS	1,688	1,377	1,855
2041611	RYE FLOUR STOCKS (1).	M CWT	(NA)	(NA)	(NA)
	24 HOUR CAPACITY (1).	DO	10	10	■

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufactures, etc., as such activities are not within scope of this survey. Only mills engaged exclusively in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

GEOGRAPHIC AREA	AUGUST 1977		JULY 1977		AUGUST 1976	
	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.1)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)
UNITED STATES, TOTAL.	51,878	23,099	43,518	19,393	54,634	24,257
MIDDLE ATLANTIC.	6,797	3,041	5,628	2,525	6,565	2,918
NEW YORK.	5,723	2,573	4,775	2,153	5,462	2,443
NORTH CENTRAL.	28,518	12,696	24,016	10,705	31,460	13,888
OHIO.	3,121	1,354	2,537	1,085	3,383	1,463
INDIANA.	1,159	497	1,201	510	1,420	605
ILLINOIS.	3,366	1,475	2,666	1,158	3,277	1,421
MICHIGAN.	787	344	692	303	804	350
MINNESOTA.	6,382	2,923	5,466	2,516	6,656	3,010
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,332	1,928	3,976	1,757	4,881	2,169
NEBRASKA.	1,554	683	1,073	469	1,922	814
KANSAS.	5,964	2,680	4,951	2,259	7,094	3,166
SOUTH ATLANTIC.	2,986	1,278	2,372	1,011	2,891	1,280
EAST SOUTH CENTRAL.	2,811	1,207	2,417	1,040	2,713	1,164
TENNESSEE.	2,164	928	1,846	802	2,094	899
WEST SOUTH CENTRAL.	3,201	1,443	2,693	1,214	3,513	1,554
OKLAHOMA.	1,350	617	1,285	585	1,692	770
TEXAS.	1,628	726	1,274	569	1,590	681
MOUNTAIN.	3,017	1,354	2,628	1,177	3,025	1,393
MONTANA.	763	359	581	274	821	372
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	4,548	2,080	3,764	1,721	4,467	2,060
WASHINGTON.	1,394	627	1,133	511	1,331	600
OREGON.	791	354	662	295	870	393
CALIFORNIA AND HAWAII.	2,363	1,099	1,969	915	2,266	1,067

(D) Withheld to avoid disclosure of figures for individual companies.

TABLE 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	July 1977	June 1977	7 months through July 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110) (1,000 cwt.)			
Total.....	350	356	1,949
Egypt.....	-	-	236
Guatemala.....	5	-	83
Colombia.....	-	-	44
Ecuador.....	-	-	3
Brazil.....	-	-	5
Israel.....	-	-	47
India.....	-	12	29
Chile.....	22	35	145
Sri Lanka (Ceylon).....	-	24	73
Philippine Republic.....	29	21	155
Morocco.....	44	37	320
Other.....	250	227	809
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120) (1,000 cwt.)			
Total.....	1,189	1,241	13,578
Nicaragua.....	4	3	19
Jamaica.....	36	15	171
Brazil.....	-	-	-
Iceland.....	5	15	52
Jordan.....	-	-	110
Saudi Arabia.....	252	559	2,798
Sri Lanka (Ceylon).....	760	452	3,548
Egypt.....	-	58	5,702
Philippine Republic.....	1	-	13
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	131	139	1,165
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (0410020) (1,000 bu.)			
Total.....	82,838	75,606	450,359
USSR.....	11,235	11,139	74,953
Venezuela.....	3,056	2,704	12,958
Peru.....	3,779	1,889	13,428
Brazil.....	4,220	3,225	11,459
Portugal.....	1,440	1,736	11,993
Iran.....	1,940	1,966	30,573
Indonesia.....	1,398	882	9,699
Korean Republic.....	5,434	5,812	39,086
China (Taiwan).....	-	-	9,932
Japan.....	10,127	9,258	71,891
Egypt.....	6,855	5,883	33,772
Nigeria.....	2,429	2,075	14,589
Other.....	30,925	29,037	116,026

Note: Data in this table are taken from Foreign Trade publication FT 410, U.S. Exports. The Schedule B codes are as follows: 0460110, wheat flour (except meal and groats); 0460120, wheat flour (wholly of U.S. wheat, except durum flour and semolina); 0410020, wheat, including spelt or meslin, unmilled, not donated for relief or charity.

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey includes firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The current month's figures include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were made, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Beginning January 1975, the data were adjusted for the number of working days in the reporting period to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving-average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the census also publishes reports on other related products as follows:

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<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Thomas Flood	(301) 763-2415
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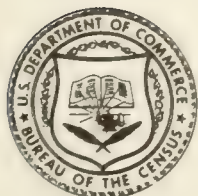
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Flour Milling Products

SEPTEMBER 1977



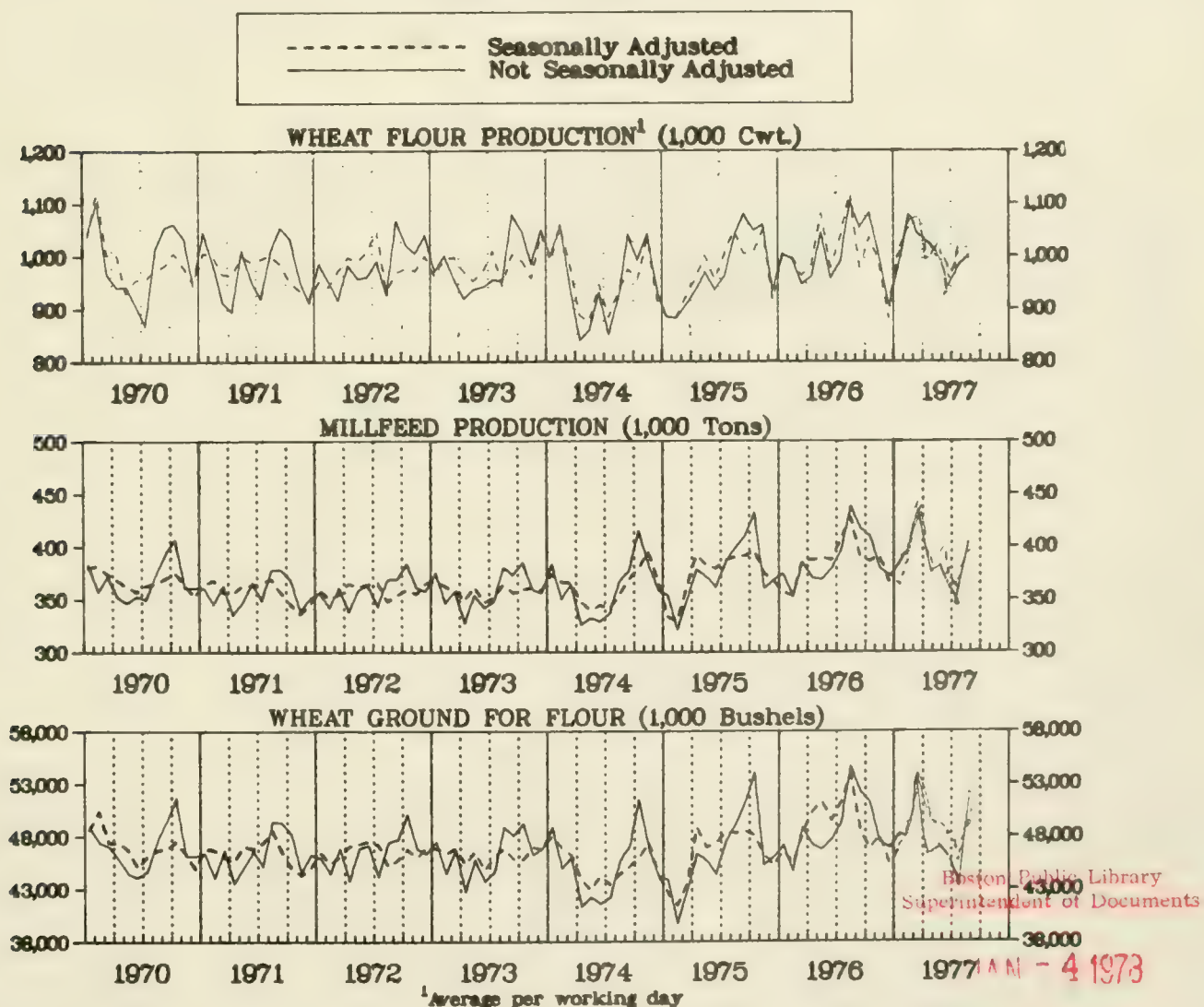
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M20A(77)-9
Issued October 1977

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series and includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING: 1970 TO 1977



DEPOSITORY

Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Thomas Flood, (301) 763-2415.

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Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

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0011173	DURUM WHEAT GROUND.	M BU	3,406	3,347	3,293
2041153	STRAIGHT SEMOLINA DURUM FLOUR	M CWT	1,453	1,442	1,497
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	313	328	298
2041611	RYE FLOUR PRODUCTION.	M CWT	143	151	135
2041618	RYE MILLFEED PRODUCTION	TONS	1,650	1,688	1,722
2041611	RYE FLOUR STOCKS (1).	M CWT	21	(NA)	23
	24 HOUR CAPACITY (1).	DO	10	(NA)	9

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within the scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

GEOGRAPHIC AREA	SEPTEMBER 1977		AUGUST 1977		SEPTEMBER 1976	
	QUANTITY WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	QUANTITY WHEAT FLOUR PRODUC- TION (1,000 CWT.)	QUANTITY WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	QUANTITY WHEAT FLOUR PRODUC- TION (1,000 CWT.)	QUANTITY WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	QUANTITY WHEAT FLOUR PRODUC- TION (1,000 CWT.)
UNITED STATES, TOTAL.	49,073	21,943	51,712	23,023	52,225	23,178
MIDDLE ATLANTIC.	6,855	3,079	6,869	3,067	6,572	2,933
NEW YORK.	5,829	2,635	5,722	2,572	5,499	2,465
NORTH CENTRAL.	26,638	11,919	28,230	12,563	29,982	13,270
OHIO.	2,823	1,234	3,121	1,354	3,412	1,476
INDIANA.	1,320	584	1,159	497	1,200	510
ILLINOIS.	3,194	1,415	3,460	1,522	3,114	1,348
MICHIGAN.	828	365	781	342	847	371
MINNESOTA.	6,066	2,771	6,382	2,923	6,298	2,884
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,016	1,800	4,332	1,928	4,845	2,145
NEBRASKA.	(D)	(D)	1,389	610	1,706	701
KANSAS.	5,534	2,490	5,753	2,575	6,643	2,983
SOUTH ATLANTIC.	2,717	1,166	2,986	1,278	2,668	1,184
EAST SOUTH CENTRAL.	2,731	1,184	2,811	1,207	2,615	1,118
TENNESSEE.	2,131	926	2,164	928	1,995	854
WEST SOUTH CENTRAL.	2,893	1,298	3,175	1,433	3,186	1,406
OKLAHOMA.	1,228	560	1,350	617	1,475	670
TEXAS.	1,437	635	1,602	716	1,444	618
MOUNTAIN.	2,968	1,337	3,017	1,354	2,923	1,313
MONTANA.	770	363	763	359	720	324
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	4,271	1,960	4,624	2,121	4,279	1,954
WASHINGTON.	1,282	579	1,394	627	1,393	620
OREGON.	784	357	867	395	756	336
CALIFORNIA AND HAWAII.	2,205	1,024	2,363	1,099	2,130	998

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

^rRevised by 5 percent or more from previously published figures.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	August 1977	July 1977	8 months through August 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110) (1,000 cwt.)			
Total.....	338	350	2,286
Egypt.....	159	-	395
Guatemala.....	1	5	85
Colombia.....	15	-	58
Ecuador.....	2	-	6
Brazil.....	-	-	5
Israel.....	16	-	63
India.....	-	-	29
Chile.....	10	22	156
Sri Lanka (Ceylon).....	-	-	73
Philippine Republic.....	15	29	170
Morocco.....	86	44	406
Other.....	34	250	840
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120) (1,000 cwt.)			
Total.....	1,138	1,189	14,716
Nicaragua.....	4	4	23
Jamaica.....	32	36	202
Brazil.....	-	-	-
Iceland.....	3	5	55
Jordan.....	-	-	110
Saudi Arabia.....	317	252	3,115
Sri Lanka (Ceylon).....	650	760	4,198
Egypt.....	-	-	5,702
Philippine Republic.....	1	1	13
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	131	131	1,298
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (0410020) (1,000 bu.)			
Total.....	93,432	82,838	543,791
U.S.S.R.....	3,841	11,235	78,794
Venezuela.....	2,145	3,056	15,103
Peru.....	957	3,779	14,385
Brazil.....	3,533	4,220	14,993
Portugal.....	2,489	1,440	14,482
Iran.....	2,575	1,940	33,149
Indonesia.....	921	1,398	10,621
Korean Republic.....	4,838	5,434	43,924
China (Taiwan).....	1,984	-	11,916
Japan.....	11,918	10,127	83,808
Egypt.....	3,770	6,855	37,541
Nigeria.....	2,072	2,429	16,661
Other.....	52,389	30,925	168,414

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are as follows: 0460110, wheat flour (except meal and groats); 0460120, wheat flour (wholly of U.S. wheat, except durum flour and semolina); 0410020, wheat, including spelt or meslin, unmilled, not donated for relief or charity.

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey includes firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, for Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The current month's figures include estimates of respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12 percent imputation rate are footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were made, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Beginning January 1975, the data were adjusted for the number of working days in the reporting period to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, or 52-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Census Bureau of the Census method II seasonal adjustment program. The seasonal adjustment program is a ratio-to-moving-average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated consistently from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

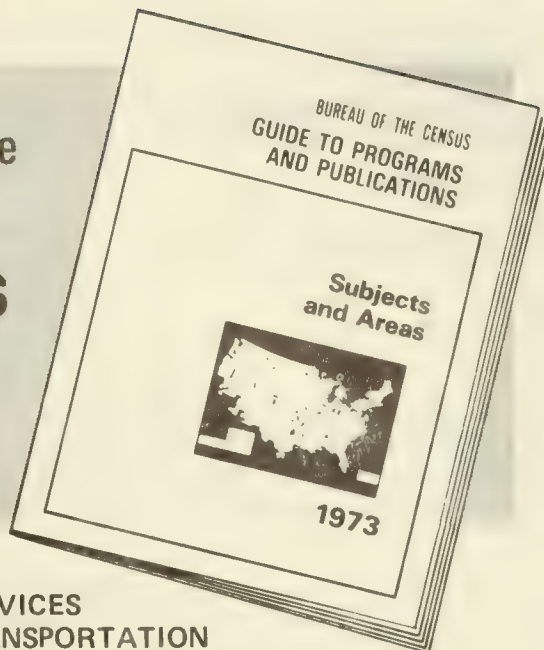
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FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Thomas Flood	(301) 763-2415
Foreign Trade publications	Paul Finn	(301) 763-5140
Bureau of Domestic Commerce	J.D. Morrissey	(202) 377-4793
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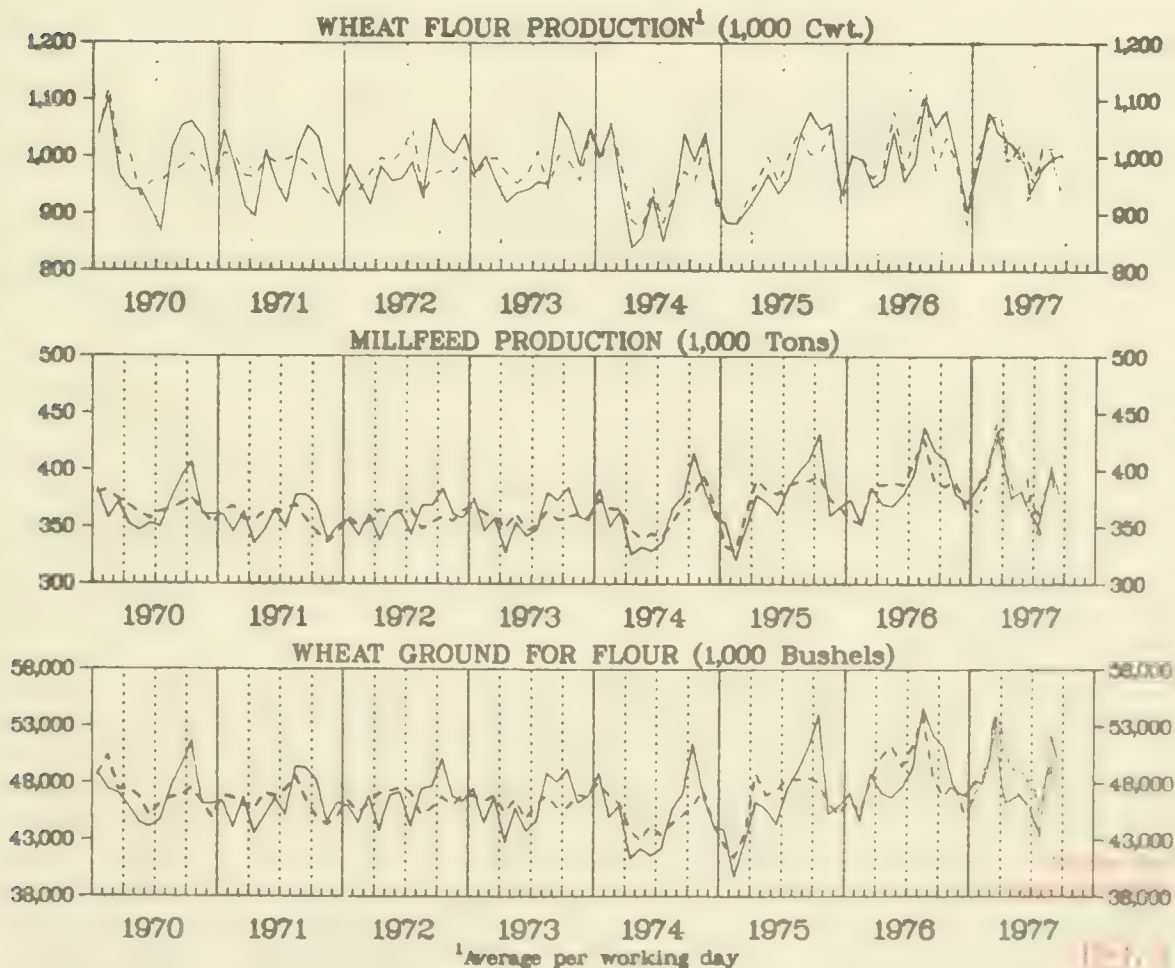
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The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING: 1970 TO 1977

----- Seasonally Adjusted
———— Not Seasonally Adjusted



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Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat flour for flour (1,000 bushels)
1977			
October.....	1,005	358	45,054
September.....	929	353	44,779
August.....	1,015	400	50,998
July.....	1,015	355	45,237
June.....	953	374	48,038
May.....	1,027	398	49,079
April.....	1,005	387	49,469
March.....	1,075	433	53,789
February.....	1,072	387	48,754
January.....	1,017	363	47,465
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	963	387	48,266
February.....	996	353	45,354
January.....	1,004	356	46,644
1975			
December.....	915	367	45,198
November.....	1,049	375	46,207
October.....	1,006	396	48,112
September.....	1,005	391	48,506

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ³ (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ⁴ (percent)
	Average per working day ¹	Calendar month total						
1977								
October.....	1,050	22,047	380,382	49,334	(NA)	(NA)	108.5	74.5
September.....	1,002	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.1
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	374,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	74.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.4
February.....	945	19,891	351,557	44,674	(NA)	991	100.4	74.1
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3
1975								
December.....	931	20,532	368,047	46,000	3,907	991	94.1	74.4
November.....	1,059	20,113	359,798	45,241	(NA)	995	106.9	74.0
October.....	1,049	24,129	422,009	54,067	(NA)	995	105.4	74.4
September.....	1,080	22,681	409,197	51,162	4,140	995	108.5	74.0

¹NA = Not available.²NA = Not available.
³Capacity for the day per month is computed on the basis of a 28-day week, 20 full days, and 8 1/2 days (1976, 1977).
January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.⁴Collected quarterly.⁵Wheat flour production is compared with amount of wheat ground.

TABLE 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	OCTOBER 1977	SEPTEMBER 1977	OCTOBER 1976
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	3,284	3,406	3,392
2041153	STRAIGHT SEMOLINA DURUM FLOUR.	M CWT	1,426	1,457	1,492
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	313	313	408
2041611	RYE FLOUR PRODUCTION.	M CWT	136	143	190
2041618	RYE MILLFEED PRODUCTION.	TONS	1,754	1,650	2,084
2041611	RYE FLOUR STOCKS (1).	M CWT	(D)	21	(NA)
	24 HOUR CAPACITY (1).	DO	(D)	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

TABLE 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHELS; WHEAT FLOUR PRODUCTION IN THOUSANDS OF HUNDREDWEIGHTS)

GEOGRAPHIC AREA	OCTOBER 1977		SEPTEMBER 1977		OCTOBER 1976	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL.	49,334	22,047	49,258	22,039	51,216	22,726
MIDDLE ATLANTIC.	6,595	2,950	6,915	3,105	6,699	3,006
NEW YORK.	5,476	2,461	5,836	2,637	5,646	2,543
NORTH CENTRAL.	27,804	12,441	26,778	11,997	28,989	12,839
OHIO.	3,155	1,381	2,848	1,246	3,493	1,507
INDIANA.	1,402	605	1,320	584	1,438	608
ILLINOIS.	3,254	1,435	3,193	1,416	3,113	1,351
MICHIGAN.	895	398	832	367	863	375
MINNESOTA.	6,147	2,820	6,066	2,771	6,264	2,869
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,441	1,978	4,016	1,800	4,674	2,078
NEBRASKA.	(D)	(D)	(D)	(D)	1,592	671
KANSAS.	5,659	2,557	5,661	2,559	5,736	2,574
SOUTH ATLANTIC.	2,488	1,055	2,715	1,165	2,626	1,176
EAST SOUTH CENTRAL.	2,623	1,137	2,713	1,177	2,697	1,148
TENNESSEE.	2,068	898	2,113	919	2,104	898
WEST SOUTH CENTRAL.	2,912	1,308	2,900	1,301	2,905	1,280
OKLAHOMA.	1,198	550	1,228	560	1,228	559
TEXAS.	1,464	647	1,444	638	1,387	591
MOUNTAIN.	2,805	1,267	2,968	1,337	2,833	1,250
MONTANA.	673	319	770	363	713	325
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	4,107	1,889	4,269	1,957	4,467	2,027
WASHINGTON.	1,261	570	1,282	579	1,500	667
OREGON.	688	311	784	357	802	363
CALIFORNIA AND HAWAII.	2,158	1,008	2,203	1,021	2,165	997

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	September 1977	August 1977	9 months through September 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110) (1,000 cwt.)			
Total.....	534	338	2,820
Egypt.....	339	159	733
Guatemala.....	-	1	85
Colombia.....	26	15	85
Ecuador.....	-	2	6
Brazil.....	-	-	5
Israel.....	-	16	63
India.....	11	-	40
Chile.....	6	10	162
Sri Lanka (Ceylon).....	-	-	73
Philippine Republic.....	-	15	170
Morocco.....	80	86	486
Other.....	72	34	912
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120) (1,000 cwt.)			
Total.....	722	1,138	15,438
Nicaragua.....	2	4	25
Jamaica.....	18	32	220
Brazil.....	22	-	22
Iceland.....	9	3	64
Jordan.....	-	-	110
Saudi Arabia.....	564	317	3,678
Sri Lanka (Ceylon).....	27	650	4,225
Egypt.....	-	-	5,702
Philippine Republic.....	-	1	13
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	80	131	1,379
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (0410020) (1,000 bu.)			
Total.....	108,512	93,432	652,303
U.S.S.R.....	4,470	3,841	83,265
Venezuela.....	2,722	2,145	17,825
Peru.....	973	957	15,358
Brazil.....	-	3,533	14,993
Portugal.....	3,277	2,489	17,759
Iran.....	3,197	2,575	13,817
Indonesia.....	7,185	921	40,334
Korean Republic.....	9,840	4,838	53,763
China (Taiwan).....	1,937	1,984	13,853
Japan.....	12,712	11,918	96,521
Egypt.....	2,892	3,770	0,434
Nigeria.....	2,726	2,072	19,387
Other.....	56,581	52,389	224,994

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are as follows: 0460110, wheat flour (except meal and groats); 0460120, wheat flour (wholly of U.S. wheat, except durum flour and semolina); 0410020, wheat, including spelt or meslin, unmilled, not donated for relief or charity.

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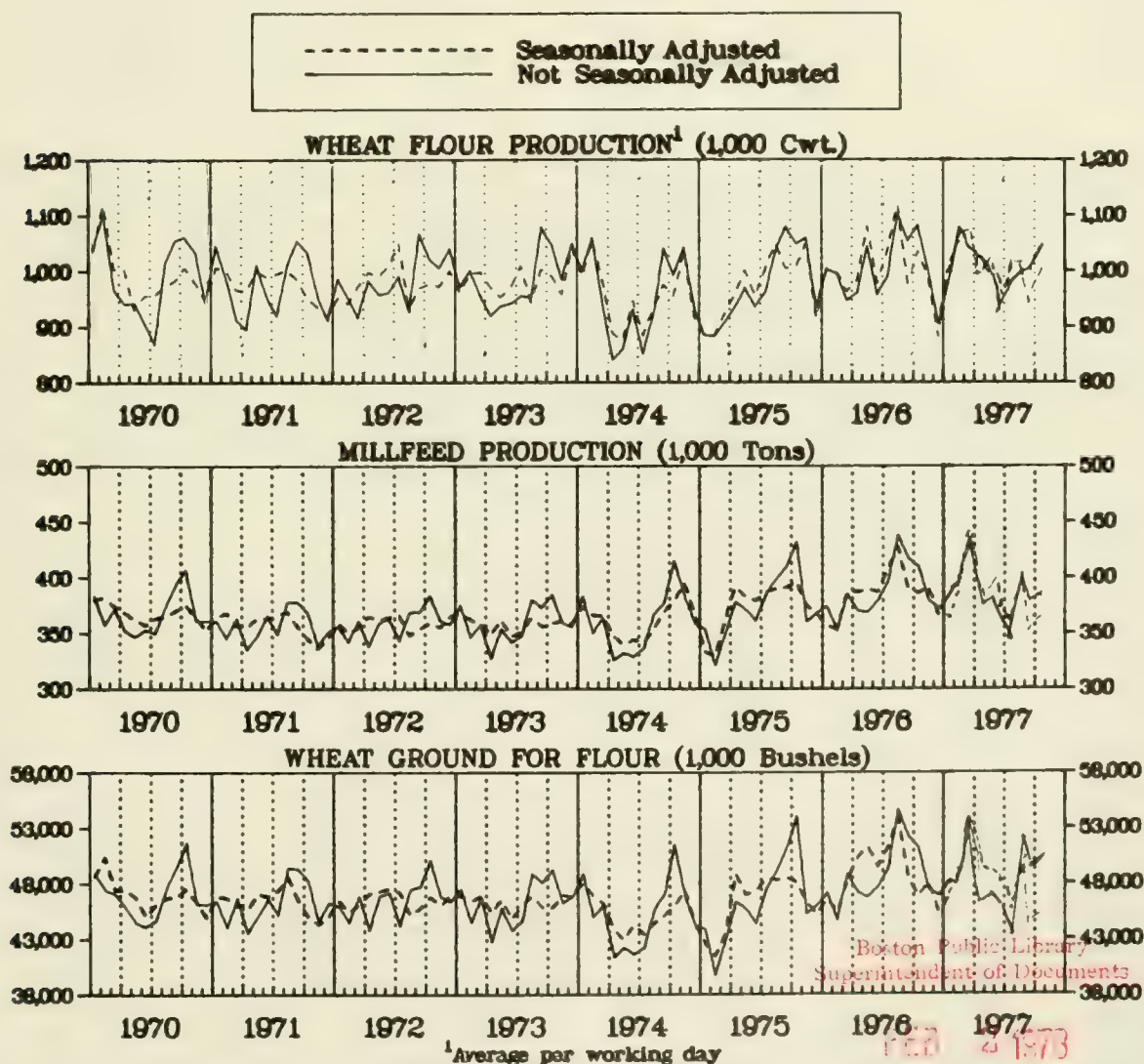
Flour Milling Products

NOVEMBER 1977

U.S. Department of Commerce
BUREAU OF THE CENSUSM20A(77)-11
Issued December 1977

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING:
1970 TO 1977

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Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Seasonally adjusted)			
Month and year	Wheat flour production average per working day ¹	Millfeed production	Wheat flour for flour
	(1,000 cwt.)	(1,000 tons)	(1,000 bushels)
1977			
November.....	1,056	401	50,725
October.....	1,005	360	45,078
September.....	929	353	44,779
August.....	1,015	400	50,998
July.....	1,015	355	45,237
June.....	953	374	48,038
May.....	1,027	398	49,079
April.....	1,005	387	49,469
March.....	1,075	433	53,789
February.....	1,072	387	48,754
January.....	1,017	363	47,465
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	963	387	48,266
February.....	996	353	45,354
January.....	1,004	356	46,644
1975			
December.....	915	367	45,198
November.....	1,049	375	46,207
October.....	1,006	396	48,112

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Not seasonally adjusted)								
Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1977								
November.....	1,068	22,419	389,358	50,116	(NA)	968	110.3	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	1,002	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.2
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3
1975								
December.....	933	20,532	368,047	46,000	3,907	991	94.1	74.4
November.....	1,059	20,113	359,798	45,241	(NA)	995	106.9	74.0
October.....	1,049	24,129	432,009	54,067	(NA)	995	105.4	74.0

Note: Data include estimate for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION,
MILL STOCKS AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	NOVEMBER 1977	OCTOBER 1977	NOVEMBER 1976
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	3,174	3,314	3,034
2041153	STRAIGHT SEMOLINA DURUM FLOUR	M CWT	1,349	1,431	1,363
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	332	313	325
2041611	RYE FLOUR PRODUCTION.	M CWT	149	136	143
2041618	RYE MILLFEED PRODUCTION	TONS	1,894	1,754	1,772
2041611	RYE FLOUR STOCKS (1).	M CWT	(NA)	(NA)	(NA)
	24 HOUR CAPACITY (1).	DO	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within the scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

TABLE 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHEL; WHEAT FLOUR PRODUCTION IN THOUSANDS
OF HUNDRED WEIGHTS)

GEOGRAPHIC AREA	NOVEMBER 1977		OCTOBER 1977		NOVEMBER 1976	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL.	50,116	22,419	49,360	22,054	47,486	21,031
MIDDLE ATLANTIC.	6,737	3,003	6,603	2,954	6,202	2,788
NEW YORK.	5,582	2,499	5,475	2,461	4,976	2,253
NORTH CENTRAL.	27,477	12,287	27,802	12,435	26,525	11,705
OHIO.	2,985	1,303	3,155	1,381	3,182	1,369
INDIANA.	1,225	530	1,387	599	1,228	518
ILLINOIS.	3,084	1,366	3,254	1,435	2,875	1,260
MICHIGAN.	884	387	895	398	902	350
MINNESOTA.	5,930	2,703	6,147	2,820	5,718	2,604
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,989	2,233	4,431	1,978	4,241	1,889
NEBRASKA.	(D)	(D)	(D)	(D)	1,603	683
KANSAS.	5,445	2,462	5,672	2,557	5,049	2,265
SOUTH ATLANTIC.	2,833	1,218	2,491	1,056	2,708	1,196
EAST SOUTH CENTRAL.	2,661	1,153	2,623	1,137	2,500	1,078
TENNESSEE.	2,147	931	2,068	898	1,937	840
WEST SOUTH CENTRAL.	3,053	1,384	2,912	1,308	2,808	1,238
OKLAHOMA.	1,367	630	1,198	550	1,127	511
TEXAS.	1,429	637	1,464	647	1,426	610
MOUNTAIN.	3,044	1,381	2,805	1,267	2,673	1,180
MONTANA.	772	367	673	319	676	306
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	4,311	1,993	4,124	1,897	4,070	1,846
WASHINGTON.	1,321	597	1,261	570	1,206	534
OREGON.	722	329	707	319	740	331
CALIFORNIA AND HAWAII.	2,290	1,067	2,156	1,008	2,124	981

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	October 1977	September 1977	10 months through October 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110) (1,000 cwt.)			
Total.....	373	534	3,193
Egypt.....	46	339	779
Guatemala.....	-	-	85
Colombia.....	9	26	93
Ecuador.....	-	-	6
Brazil.....	-	-	5
Israel.....	42	-	105
India.....	13	11	53
Chile.....	3	6	164
Sri Lanka (Ceylon).....	40	-	112
Philippine Republic.....	-	-	170
Morocco.....	74	80	560
Other.....	146	72	1,061
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120) (1,000 cwt.)			
Total.....	467	722	15,905
Nicaragua.....	-	2	25
Jamaica.....	-	18	220
Brazil.....	-	22	22
Iceland.....	1	9	65
Jordan.....	-	-	110
Saudi Arabia.....	216	564	3,894
Sri Lanka (Ceylon).....	148	27	4,373
Egypt.....	-	-	5,702
Philippine Republic.....	-	-	13
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	102	80	1,481
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (0410020) (1,000 bu.)			
Total.....	68,258	108,512	720,561
U.S.S.R.....	2,812	4,470	86,077
Venezuela.....	2,205	2,722	20,031
Peru.....	63	973	15,421
Brazil.....	965	-	15,957
Portugal.....	1,817	3,277	19,576
Iran.....	1,109	3,197	41,443
Indonesia.....	-	7,185	13,817
Korean Republic.....	2,957	9,840	56,721
China (Taiwan).....	992	1,937	14,845
Japan.....	9,900	12,712	106,421
Egypt.....	3,624	2,892	44,057
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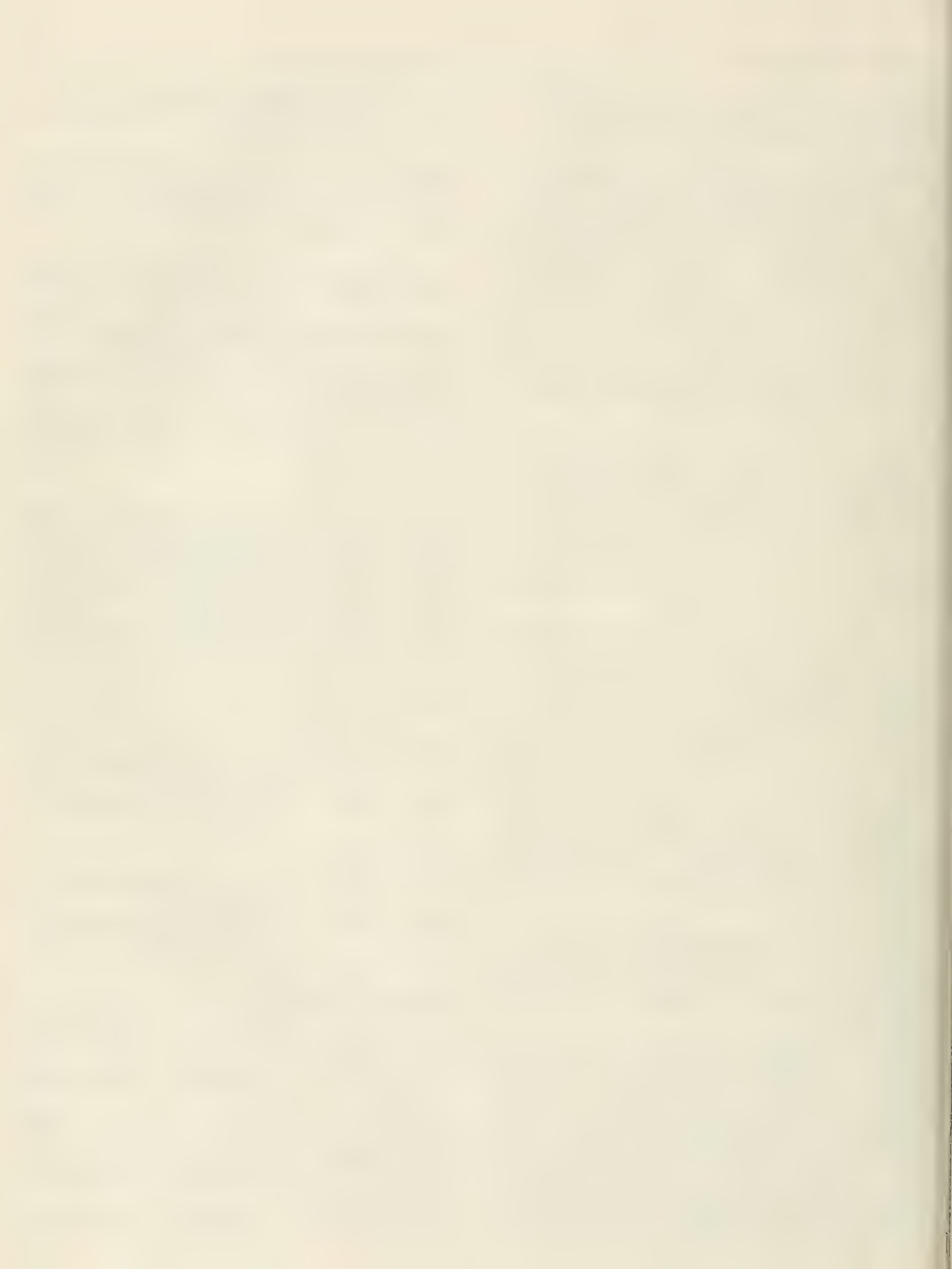
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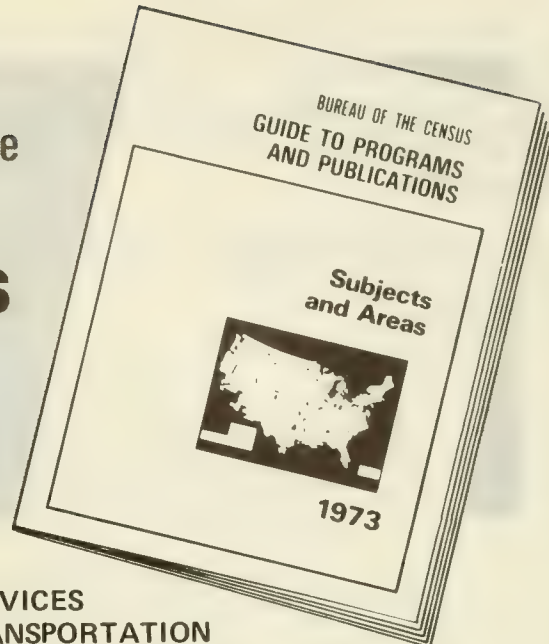
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DECEMBER 1977

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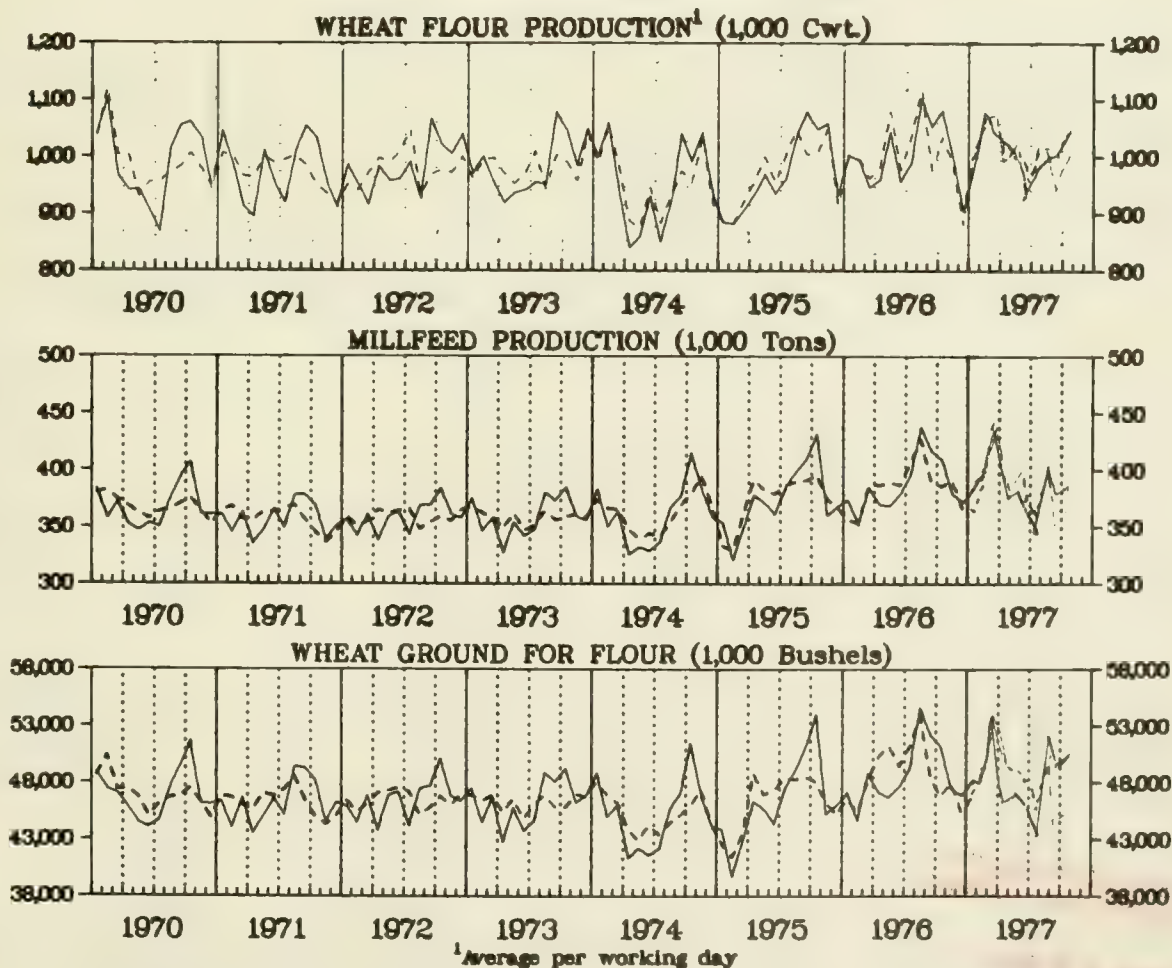
M20A(77)-12
Issued February 1978

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING: 1970 TO 1977

----- Seasonally Adjusted
———— Not Seasonally Adjusted



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Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1977			
December.....	988	370	46,043
November.....	1,057	401	50,775
October.....	1,005	360	45,078
September.....	929	353	44,779
August.....	1,015	400	50,998
July.....	1,015	355	45,237
June.....	953	374	48,038
May.....	1,027	398	49,079
April.....	1,005	387	49,469
March.....	1,075	433	53,789
February.....	1,072	387	48,754
January.....	1,017	363	47,465
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	961	387	48,266
February.....	998	353	45,354
January.....	1,004	352	47,544
1975			
December.....	915	367	45,198
November.....	1,049	375	46,207

See footnotes at end of Table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1977								
December.....	1,011	21,230	373,320	47,286	4,498	965	104.8	74.8
November.....	1,069	22,445	389,311	50,166	(NA)	968	110.4	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	1,002	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	56,434	4,248	976	103.4	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	106.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.3
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.1
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.2
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3
1975								
December.....	933	20,532	368,047	46,000	3,907	991	94.1	74.4
November.....	1,059	20,113	359,798	45,241	(NA)	995	106.9	74.0

Note: Data include estimate for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production of these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5 day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

TABLE 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	DECEMBER 1977	NOVEMBER 1977	DECEMBER 1976
DURUM WHEAT (INCLUDED IN TABLE 1 DATA):					
0011173	DURUM WHEAT GROUND.	M BU	3,017	3,174	2,917
2041153	STRAIGHT SEMOLINA DURUM FLOUR.	M CWT	1,326	1,349	1,304
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
RYE:					
0011951	RYE GROUND FOR FLOUR.	M BU	334	332	364
2041611	RYE FLOUR PRODUCTION.	M CWT	153	149	171
2041618	RYE MILLFEED PRODUCTION.	TONS	1,788	1,894	1,958
2041611	RYE FLOUR STOCKS (1).	M CWT	24	(NA)	24
	24 HOUR CAPACITY (1).	DO	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

TABLE 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHEL; WHEAT PRODUCTION IN THOUSANDS OF HUNDREDWEIGHT)

GEOGRAPHIC AREA	DECEMBER 1977		NOVEMBER 1977		DECEMBER 1976	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL.	47,286	22,387	50,166	23,747	46,931	20,804
MIDDLE ATLANTIC.	6,297	2,987	6,785	3,232	6,026	2,704
NEW YORK.	5,212	2,336	5,583	2,499	4,952	2,234
NORTH CENTRAL.	26,090	12,360	27,390	13,013	26,216	11,639
OHIO.	3,333	1,452	2,985	1,303	2,869	1,242
INDIANA.	1,256	549	1,225	537	1,263	529
ILLINOIS.	2,559	1,135	3,215	1,424	2,791	1,224
MICHIGAN.	486	349	563	387	744	324
MINNESOTA.	5,447	2,491	5,930	2,703	5,724	2,626
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,308	1,951	4,989	2,233	4,315	1,912
NEBRASKA.	(D)	(D)	(D)	(D)	1,568	671
KANSAS.	6,087	3,096	5,548	2,905	5,164	2,322
SOUTH ATLANTIC.	2,557	1,319	2,833	1,436	2,318	983
EAST SOUTH CENTRAL.	2,579	1,122	2,666	1,155	2,701	1,150
TENNESSEE.	2,031	888	2,147	931	2,052	871
WEST SOUTH CENTRAL.	2,933	1,473	3,119	1,532	2,796	1,229
OKLAHOMA.	1,301	598	1,367	630	1,274	578
TEXAS.	1,389	620	1,495	664	1,320	558
MOUNTAIN.	2,981	1,353	3,044	1,381	2,793	1,234
MONTANA.	704	331	772	367	644	292
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	3,849	1,773	4,329	1,998	4,081	1,865
WASHINGTON.	1,106	501	1,321	597	1,241	559
OREGON.	657	302	722	329	749	334
CALIFORNIA AND HAWAII.	2,086	970	2,286	1,072	2,091	972

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	November 1977	October 1977	11 months through November 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110) (1,000 cwt.)			
Total.....	148	373	3,341
Egypt.....	-	46	779
Guatemala.....	-	-	85
Colombia.....	2	9	95
Ecuador.....	-	-	5
Brazil.....	-	-	5
Israel.....	-	42	105
India.....	6	13	59
Chile.....	25	3	189
Sri Lanka (Ceylon).....	-	40	112
Philippine Republic.....	-	-	170
Morocco.....	62	74	621
Other.....	53	146	1,116
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120) (1,000 cwt.)			
Total.....	762	467	16,667
Nicaragua.....	5	-	29
Jamaica.....	6	-	226
Brazil.....	-	-	22
Iceland.....	7	1	72
Jordan.....	-	-	110
Saudi Arabia.....	339	216	4,234
Sri Lanka (Ceylon).....	13	148	4,386
Egypt.....	-	-	-
Philippine Republic.....	-	-	13
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	392	102	9,091
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (0410020) (1,000 bu.)			
Total.....	56,667	68,258	771,116
U.S.S.R.....	10,560	2,812	96,637
Venezuela.....	1,505	2,205	21,535
Peru.....	146	63	155,673
Brazil.....	2,605	965	18,562
Portugal.....	-	1,817	19,576
Iran.....	1,324	1,109	-
Indonesia.....	1,345	-	15,163
Korean Republic.....	525	2,957	57,246
China (Taiwan).....	1,396	992	16,241
Japan.....	2,611	9,900	109,031
Egypt.....	2,624	3,624	46,681
Nigeria.....	1,580	1,496	22,463
Other.....	30,446	40,318	198,420

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are as follows: 0460110, wheat flour (except meal and groats); 0460120, wheat flour (wholly of U.S. wheat, except durum flour and semolina); 0410020, wheat, including spelt or meslin, unmilled, not donated for relief or charity.

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The current month's figures include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were made, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Beginning January 1975, the data were adjusted for the number of working days in the reporting period to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving-average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

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M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

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Flour Milling Products



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SUMMARY FOR 1977

M20A(77)-13
Issued September 1978

SUMMARY OF FINDINGS

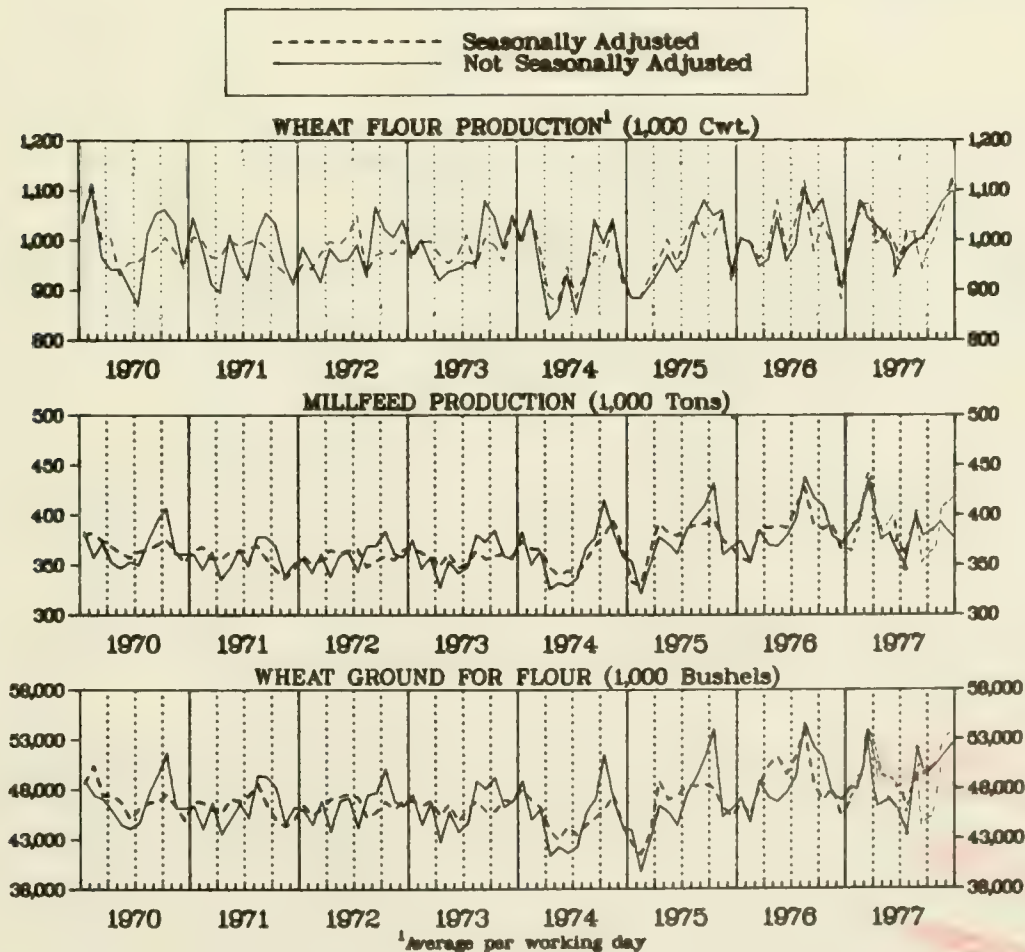
Total commercial production of wheat flour in 1977 amounted to 261.4 million cwt. sacks about 1.9 million cwt. sacks above the 1976 production. Production figures in 1977 and 1976 were at 100.3 and 101.6 percent, respectively, of total annual capacity.

Wheat mills in 1977 and 1976 ground 586.1 and 584.1 million bushels of wheat; corresponding millfeed production figures for these years were 4,593 and 4,643 thousand tons.

Production of rye flour in 1977 amounted to 1,660 thousand cwt. sacks, compared with 1,759 thousand cwt. in 1976. Rye grinding in 1977 and 1976 were 3,637 and 3,854 thousand bushels, respectively.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1970 TO 1977



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233 or call Geraldine Bynum, (301) 763-7808.

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Table 1. SUMMARY: COMMERCIAL WHEAT MILLING PRODUCTION: 1952 TO 1977

Year	Wheat flour production ¹ (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Average pounds per cwt. sacks of flour		Flour extraction rate ² (percent)
				Wheat	Millfeed	
1952.....	228,148	532,374	4,605	140.0	40.4	71.4
1953.....	222,177	515,446	4,432	139.2	39.9	71.8
1954.....	221,405	514,028	4,440	139.3	40.1	71.8
1955.....	225,648	522,851	4,482	139.0	39.7	71.9
1956.....	229,758	527,159	4,416	137.7	38.4	72.6
1957.....	238,888	548,532	4,584	137.8	38.4	72.6
1958.....	248,004	566,688	4,713	137.1	38.0	72.9
1959.....	250,568	570,856	4,707	136.7	37.6	73.2
1960.....	255,141	582,719	4,827	137.0	37.8	73.0
1961.....	260,316	591,999	4,858	136.4	37.3	73.3
1962.....	262,069	595,353	4,876	136.3	37.2	73.4
1963.....	260,007	589,245	4,794	136.0	36.9	73.5
1964.....	261,663	591,654	4,890	135.7	37.4	73.7
1965.....	250,384	564,724	4,645	135.3	37.1	73.9
1966.....	253,000	568,672	4,619	134.8	36.5	74.1
1967.....	245,240	549,801	4,423	134.5	36.1	74.3
1968.....	254,185	569,649	4,511	134.5	35.5	74.4
1969.....	254,094	567,956	4,458	134.1	35.1	74.6
1970.....	253,094	563,714	4,409	133.6	34.8	74.8
1971.....	249,810	555,092	4,279	133.3	34.3	75.0
1972.....	250,441	557,801	4,303	133.6	34.4	74.8
1973.....	249,265	555,269	4,303	133.7	34.5	74.8
1974.....	242,157	542,904	4,323	134.5	35.7	-
1975.....	247,080	555,891	4,485	134.9	36.3	74.1
1976.....	259,486	584,082	4,643	135.1	35.8	74.0
1977.....	261,405	586,145	4,593	134.5	35.1	74.3

¹Based on 1954 Census of Manufactures. See Census report MC-20D, Grain Mill Products.²Wheat flour production as compared with the amount of wheat ground.

Table 2. COMMERCIAL WHEAT MILLING PRODUCTION, SEASONALLY ADJUSTED AND UNADJUSTED, BY MONTHS: 1977 AND 1976

Month	Seasonally adjusted			Unadjusted						Flour extraction rate ² (percent)
	Wheat flour production average per working day ¹ (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Mill feed production (1,000 tons)	Wheat flour production (1,000 cwt. sacks)		Wheat ground for flour (1,000 bushels)	Mill feed production (1,000 tons)	Average pounds per cwt. sack of flour		
				Average per working day ¹	Calendar month, total			Wheat	Millfeed	
1977										
Total.....	(X)	(X)	(X)	(X)	261,405	586,145	4,593	134.5	35.1	74.3
January.....	1,017	47,465	363	1,015	21,320	48,035	380	135.2	35.6	74.0
February.....	1,072	48,754	387	1,071	21,425	48,023	385	134.5	35.9	74.4
March.....	1,075	53,789	433	1,057	24,321	54,434	430	134.3	35.4	74.5
April.....	1,005	49,469	387	982	20,632	46,402	370	134.9	35.9	74.1
May.....	1,027	49,079	398	993	20,861	46,870	375	134.8	36.0	74.2
June.....	953	48,038	374	933	20,529	46,261	367	135.2	35.8	74.0
July.....	1,015	45,237	355	970	19,393	43,518	345	134.6	35.6	74.3
August.....	1,015	50,998	400	1,001	23,023	51,712	410	134.8	35.6	74.2
September.....	929	44,779	353	1,002	22,039	49,258	378	134.1	34.3	74.6
October.....	1,005	45,078	360	1,050	22,054	49,360	383	134.3	34.7	74.5
November.....	1,057	50,775	401	1,069	22,445	50,166	389	134.1	34.7	74.6
December.....	1,137	53,169	421	1,112	23,363	52,106	381	133.8	32.6	74.7
1976										
Total.....	(X)	(X)	(X)	(X)	259,486	584,082	4,643	135.1	35.8	74.0
January.....	1,004	46,644	356	1,002	21,037	47,204	374	134.7	35.6	74.3
February.....	996	45,354	353	995	19,891	44,674	352	134.8	35.4	74.2
March.....	963	48,266	387	947	21,771	48,845	385	134.6	35.4	74.3
April.....	983	50,311	387	960	21,113	47,192	370	134.1	35.0	74.5
May.....	1,080	51,287	389	1,044	20,871	46,758	369	134.4	35.4	74.4
June.....	978	49,476	387	957	21,059	47,645	379	135.7	36.0	73.7
July.....	1,035	51,218	407	989	21,751	49,272	396	135.9	36.4	73.6
August.....	1,119	53,879	427	1,103	24,257	54,634	438	135.1	36.1	74.2
September.....	977	48,536	389	1,053	23,178	52,225	417	135.2	36.0	73.4
October.....	1,035	46,773	386	1,082	22,723	51,216	410	135.2	36.1	73.9
November.....	990	48,063	391	1,001	21,031	47,486	380	135.5	36.1	73.8
December.....	885	45,697	370	905	20,804	46,931	373	135.4	35.9	73.9

(X) Not applicable.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays, unless such holidays fall on Saturday: January 1, May 30, July 4, Labor Day, Thanksgiving Day, and December 25.²Wheat flour production is compared with amount of wheat ground.

Table 3. COMMERCIAL RYE MILLING PRODUCTION, BY MONTHS: 1977 AND 1976

Month	Rye flour production (1,000 cwt. sacks)	Rye ground for flour (1,000 bushels)	Millfeed production (tons)	Average pounds ground per cwt. sack of flour		Flour extraction rate ¹
				Rye	Millfeed	(percent)
1977						
Total.....	1,660	3,637	19,200	122.7	23.1	81.5
January.....	140	305	1,751	122.0	25.0	82.0
February.....	130	302	1,410	130.1	21.8	76.9
March.....	141	316	1,690	125.5	22.0	79.7
April.....	135	282	1,413	117.0	20.9	85.5
May.....	126	272	1,396	120.9	22.2	82.7
June.....	131	277	1,389	118.4	21.2	84.5
July.....	125	263	1,377	117.8	22.0	84.9
August.....	151	328	1,688	121.6	22.4	82.2
September.....	143	313	1,650	122.6	23.1	81.6
October.....	136	313	1,754	128.9	25.8	77.6
November.....	149	332	1,894	124.8	25.4	80.1
December.....	153	334	1,788	122.2	23.4	81.8
1976						
Total.....	1,759	3,854	21,292	122.7	24.2	81.5
January.....	181	390	2,040	120.7	22.5	82.9
February.....	142	308	1,645	121.5	23.2	82.3
March.....	163	353	1,939	121.3	23.8	82.5
April.....	150	333	1,820	124.3	24.3	80.4
May.....	113	251	1,267	124.4	22.4	80.4
June.....	^r 150	^r 320	1,933	119.5	25.7	83.7
July.....	137	305	1,680	124.7	24.5	80.2
August.....	144	322	1,855	125.2	25.8	79.9
September.....	135	298	1,722	123.6	25.5	80.9
October.....	130	285	1,661	122.8	25.6	81.5
November.....	143	325	1,772	127.3	24.8	78.6
December.....	171	364	1,958	119.2	22.9	83.9

^rRevised from previously published figures.¹Rye flour production as compared with amount of rye ground.

Table 4. COMMERCIAL WHEAT MILLING PRODUCTION, BY GEOGRAPHIC AREAS: 1977 AND 1976

Geographic areas	1977				1976			
	Wheat ground for flour (1,000 bushels)	Wheat flour production			Wheat ground for flour (1,000 bushels)	Wheat flour production		
		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²
United States, total.....	586,145	261,405	1,021,624	100.3	584,082	259,486	990,109	101.6
Middle Atlantic Division.....	75,261	33,706	132,681	99.6	73,201	32,572	127,143	99.3
New York.....	62,175	28,008	105,732	103.9	60,815	27,208	106,314	99.2
North Central Region.....	323,900	144,587	567,262	100.0	330,469	146,342	557,037	101.8
Ohio.....	33,967	14,727	62,201	92.9	36,206	15,707	69,995	87.0
Indiana.....	15,165	6,486	21,483	118.4	15,502	6,554	21,283	119.4
Illinois.....	36,662	16,064	60,355	104.4	35,081	15,362	64,311	92.6
Michigan.....	9,147	4,153	20,049	81.2	9,374	4,053	19,511	80.5
Minnesota.....	70,372	32,236	128,011	98.8	70,980	32,151	117,131	106.4
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	53,502	23,881	86,762	107.9	52,811	23,589	84,850	107.8
Nebraska.....	(D)	(D)	(D)	(D)	18,869	7,965	34,156	90.4
Kansas.....	69,066	31,114	120,398	101.3	70,366	31,570	106,966	114.4
South Atlantic Division.....	33,484	14,342	52,462	107.2	30,936	13,754	44,303	120.3
East South Central Division.....	31,504	13,610	48,293	110.5	30,908	13,601	54,057	97.5
Tennessee.....	24,574	10,641	36,817	113.3	24,098	10,445	35,481	114.1
West South Central Division.....	36,984	16,502	58,530	110.6	35,970	15,931	57,799	106.8
Oklahoma.....	16,511	7,526	28,037	105.3	16,545	(D)	27,509	(D)
Texas.....	17,059	7,497	28,158	104.4	16,599	7,113	25,290	109.0
Mountain Division.....	33,688	15,158	66,531	89.3	33,611	14,912	65,360	88.4
Montana.....	8,170	3,861	17,797	85.1	7,773	3,528	13,736	99.6
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific Division.....	51,324	23,500	95,865	96.1	48,987	22,374	84,410	102.7
Washington.....	15,696	7,076	27,481	101.0	15,183	6,833	27,481	96.4
Oregon.....	9,398	4,238	20,025	83.0	9,195	4,122	20,025	79.8
California and Hawaii.....	26,230	12,186	48,359	98.8	24,609	11,419	36,904	120.0

(D) Withheld to avoid disclosing figures for individual companies.

¹Capacity as reported for December of each year. ²Estimated annual capacity is obtained by multiplying daily capacity by the number of work days during the year, 255 for 1977, and 258 for 1976. This figure is calculated on the basis of a 5-day week with allowances for the following holidays unless such holidays fall on Saturday: January 1, Memorial Day, July 4, Labor Day, Thanksgiving Day, and December 25.

Table 5. PRODUCTION AND MILL STOCKS OF WHEAT FLOUR, BY QUARTERS: 1977 AND 1976

Quarter	Production (1,000 cwt. sacks)	Mill stocks (1,000 cwt. sacks)
1977		
First.....	67,066	4,248
Second.....	62,022	4,167
Third.....	64,455	3,537
Fourth.....	67,862	4,160
1976		
First.....	62,699	4,510
Second.....	63,043	3,923
Third.....	69,186	3,621
Fourth.....	64,558	4,334

Table 6. DURUM WHEAT PRODUCTS: 1977 AND 1976

Item	1977		1976	
	Jan. 1- June 30	July 1- Dec. 31	Jan. 1- June 30	July 1- Dec. 31
Durum wheat ground (thousand bushels).....	18,673	19,056	17,186	17,940
Straight semolina and durum flour produced (thousand sacks (cwt.)).....	8,110	8,253	7,434	7,915
Blended semolina and durum flour produced (thousand sacks (cwt.)).....	(D)	(D)	(D)	(D)

(D) Withheld to avoid disclosing figures for individual companies.

Table 7. PRODUCTION, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF WHEAT FLOUR AND SEMOLINA AND DURUM FLOUR: 1977 AND 1976

(Quantity in 1,000 cwt., value in \$1,000)

Product code	Item	Quantity produced	Exports of domestic merchandise ¹		Percent exports to manufacturers' production	Imports for consumption ²	Calculated import duty (\$1,000)	Apparent consumption ³ (1,000 cwt.)
			Quantity	Value				
	1977							
20411 --	Wheat flour.....	261,405	21,501	177,007	8.2	-	-	239,904
20411 --	Semolina and durum flour.....	16,363	138	1,396	0.8	-	-	16,225
	1976							
20411 --	Wheat flour.....	259,486	15,663	157,266	6.0	-	-	243,823
20411 --	Semolina and durum flour.....	15,349	30	264	0.2	-	-	15,319

Note: Comparison of import and export codes is as follows:

¹Source: Bureau of the Census Report FT-410, U.S. Exports of Domestic Merchandise; SIC-Based Products and Area.²Source: Bureau of the Census Report FT-135, U.S. Imports for Consumption and General Imports; SIC-Based Products and Area.³Apparent consumption is derived by subtracting exports from the total manufacturers' production. Imports are not used in this instance because import data for flour are not separately available. Imports (TSUSA codes 1314000 and 1318500) of flour are considered to be insignificant.

Domestic output	Exports	Imports
20411 -- Wheat flour.....	0460110; 0460120	-
20411 -- Semolina and durum flour.....	0460130	-

DESCRIPTION OF SURVEY

Scope of Survey—This survey includes firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The money figures include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the

Bureau of the Census Method II seasonal adjustment program. This program is a ratio-to-moving average method. It largely eliminates the effect to seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data provide a better measure of the month-to-month variations which are due to factors other than seasonal pattern. Additional information concerning seasonal adjustment is available in the seasonal adjustment supplement issued in this series.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) **Valuation**—Domestic producers' shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition values at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters' trade margin above costs increases the export values compared with producers' values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values; etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves

through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

HISTORICAL NOTE

The current M20A series of monthly reports with annual summaries of wheat ground and wheatmilling products originated in May 1923. Data by States have been published monthly since 1927. Beginning in 1931 and ending with the June 1947 report, monthly wheat flour production by capacity groups was published. The annual summary report during the years 1931 to 1964 also contained a table showing production by capacity groups. Past copies of this report and other Current Industrial Reports can be found in the Federal Depository Library in your area. These libraries keep Current Industrial Reports (called Facts for Industry, before 1959) permanently available.

RELATED REPORTS

A monthly report is also published in this series.

The Bureau of the Census also publishes reports on other related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472

Subject Area	Contact	Phone Number
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To order Census Bureau microfiche	Dorothy Dunham	(301) 763-5042
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ACKNOWLEDGMENTS

This report was prepared in the Industry Division under the direction of Robert J. Nealon, Chief, Current Nondurables Branch and Carole A. Klein, Chief, Food, Apparel, and Textiles Section. Geraldine Bynum was directly responsible for the review of the data and preparation of the report. Milton Eisen, Chief of the Division, and John R. Wikoff, Assistant Chief for Current Programs, provided overall direction and coordination to this project.

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1976 and 1977 Revised

M20A(77)-14
Issued November 1978

The data as shown in this report supersede those data published in the M20A Summary for 1977. Approximately six establishments were added to this survey in January 1978 based upon an extensive reconciliation with the 1976 Annual Survey of

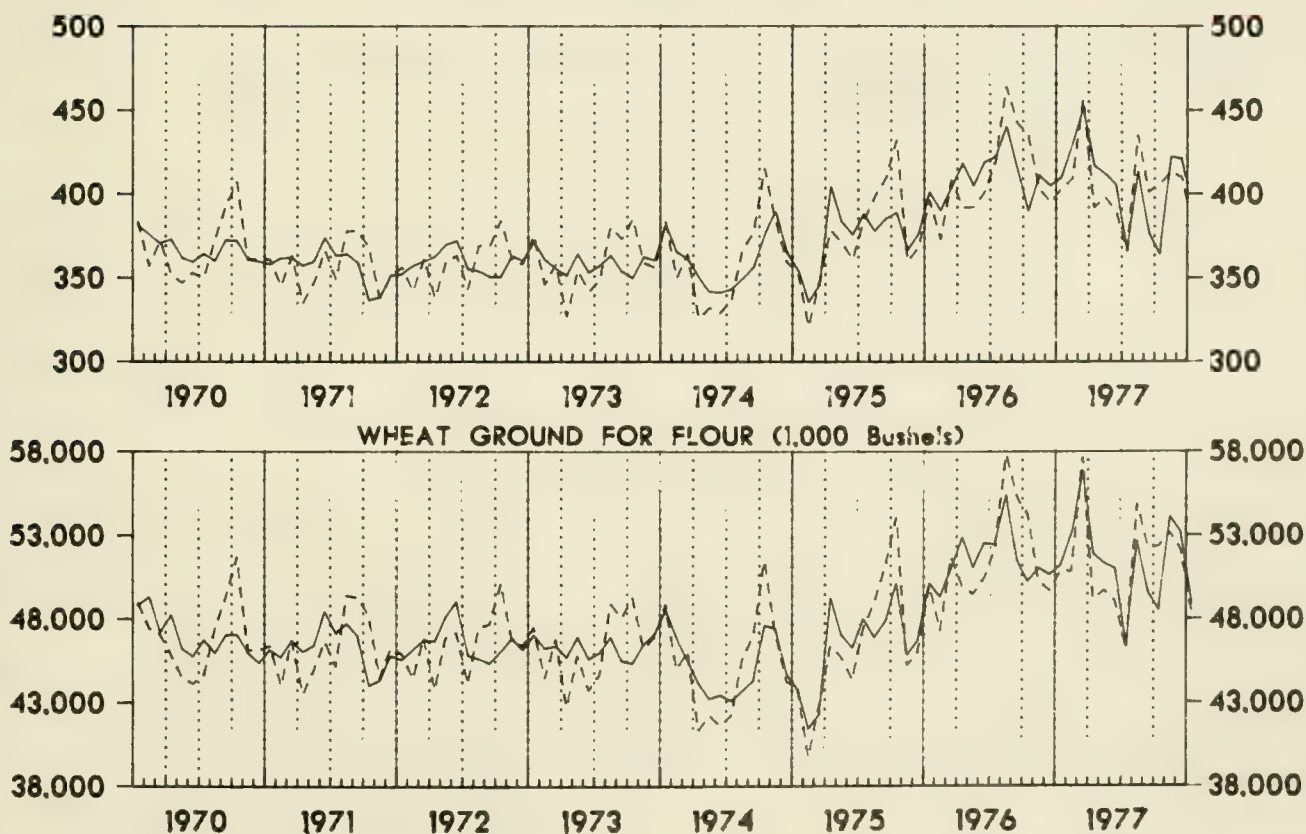
Manufactures (ASM). Data for 1976 and 1977 have been estimated for these plants based upon their 1976 ASM data and their 1978 M20A reports.

WHEAT FLOUR MILLING: 1970 TO 1977



MILLFEED PRODUCTION (1,000 Tons)

DEPOSITORY



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233 or call Geraldine Bynum, (301) 763-7808.

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Table 1. COMMERCIAL WHEAT MILLING PRODUCTION, BY GEOGRAPHIC AREAS: 1976 AND 1977

Geographic area	1977				1976			
	Wheat ground for flour (1,000 bushels)	Wheat flour production			Wheat ground for flour (1,000 bushels)	Wheat flour production		
		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²
United States, total.....	618,125	275,784	1,072,143	101.9	618,284	275,077	1,040,628	102.5
Middle Atlantic Division.....	79,695	35,981	138,781	101.7	77,996	34,796	133,243	101.2
New York.....	62,175	28,008	105,732	103.9	60,815	27,208	106,314	99.2
North Central Region.....	338,391	150,371	589,622	100.0	345,956	153,051	579,397	102.4
Ohio.....	33,967	14,727	62,201	92.9	36,206	15,707	69,995	87.0
Indiana.....	15,165	6,486	21,483	118.4	15,502	6,554	21,283	119.4
Illinois.....	36,662	16,064	60,355	104.4	35,081	15,362	64,311	92.6
Michigan.....	9,147	4,153	20,049	81.2	9,374	4,053	19,511	80.5
Minnesota.....	70,372	32,236	128,011	98.8	70,980	32,151	117,131	106.4
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	53,502	23,881	86,762	107.9	52,811	23,589	84,850	107.8
Nebraska.....	(D)	(D)	(D)	(D)	24,241	10,452	41,756	97.0
Kansas.....	78,524	35,769	135,158	103.8	80,481	36,037	121,726	114.7
South Atlantic Division.....	38,615	16,986	61,838	107.7	36,359	16,545	53,679	119.5
East South Central Division.....	31,504	13,610	48,293	110.5	30,908	13,601	54,057	97.5
Tennessee.....	24,574	10,641	36,817	113.3	24,098	10,445	35,481	114.1
West South Central Division.....	40,507	18,198	63,530	112.3	39,810	17,665	62,799	109.0
Oklahoma.....	16,511	7,526	28,037	105.3	16,545	(D)	27,509	(D)
Texas.....	17,059	7,497	28,158	104.4	16,599	7,113	25,290	109.0
Mountain Division.....	33,688	15,158	66,531	89.3	33,611	14,912	65,360	88.4
Montana.....	8,170	3,861	17,797	85.1	7,773	3,528	13,736	99.6
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific Division.....	55,725	25,480	103,548	96.5	53,644	24,507	92,093	103.1
Washington.....	15,696	7,076	27,481	101.0	15,183	6,833	27,481	96.4
Oregon.....	9,398	4,238	20,025	83.0	9,195	4,122	20,025	79.8
California and Hawaii.....	30,631	14,166	56,042	99.1	29,266	13,552	44,587	117.8

¹Capacity as reported for December of each year.²Estimated annual capacity is obtained by multiplying daily capacity by the number of workdays during the year, 255 for 1977 and 258 for 1976. This figure is calculated on the basis of a 5 day week with allowances for the following holiday unless such holidays fall on Saturday: January 1, Memorial Day, July 4, Labor Day, Thanksgiving Day and December 25.

Table 2A. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES BY MONTH-1976 REVISED

(Wheat ground for flour in thousands of bushels; wheat flour produced in thousands of hundredweight)

Geographic area	December		November		October		September		August		July	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	49,691	22,058	50,273	22,297	54,225	24,090	55,294	24,572	57,825	25,715	52,145	23,063
Middle Atlantic.....	6,409	2,883	6,589	2,969	7,117	3,201	6,998	3,132	7,008	3,126	6,452	2,865
New York.....	4,952	2,234	4,976	2,253	5,646	2,543	5,499	2,465	5,462	2,443	5,224	2,321
North Central.....	27,468	11,967	27,789	12,278	30,354	13,455	31,374	13,901	32,907	14,548	29,178	12,860
Ohio.....	2,869	1,242	3,182	1,369	3,493	1,507	3,412	1,476	3,383	1,463	3,034	1,312
Indiana.....	1,263	529	1,228	518	1,438	608	1,200	510	1,420	605	1,325	560
Illinois.....	2,791	1,224	2,875	1,260	3,113	1,351	3,114	1,348	3,277	1,421	2,699	1,154
Michigan.....	744	326	902	350	863	375	847	371	804	350	735	315
Minnesota.....	5,724	2,626	5,718	2,604	6,264	2,869	6,298	2,884	6,656	3,010	5,584	2,514
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	365
Missouri.....	4,315	1,912	4,241	1,889	4,674	2,078	4,845	2,145	4,881	2,169	4,604	2,043
Nebraska.....	2,003	871	2,042	885	2,066	889	2,189	923	2,424	1,046	2,066	886
Kansas.....	5,981	2,689	5,874	2,636	6,627	2,975	7,552	3,392	8,039	3,594	7,476	3,238
South Atlantic.....	2,756	1,421	3,150	1,397	3,103	1,393	3,155	1,405	3,397	1,511	3,079	1,351
East South Central.....	2,701	1,150	2,500	1,078	2,697	1,148	2,615	1,118	2,713	1,164	2,551	1,102
Tennessee.....	2,052	871	1,937	840	2,104	898	1,995	854	2,094	899	1,977	855
West South Central.....	3,106	1,366	3,121	1,376	3,243	1,429	3,531	1,558	3,872	1,713	3,575	1,578
Oklahoma.....	1,274	578	1,127	511	1,228	559	1,475	670	1,692	770	1,597	722
Texas.....	1,320	558	1,426	610	1,387	591	1,444	618	1,590	681	1,417	607
Mountain.....	2,793	1,234	2,673	1,180	2,833	1,250	2,923	1,313	3,025	1,393	2,929	1,298
Montana.....	644	292	676	306	713	325	720	324	821	372	671	309
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,458	2,037	4,451	2,019	4,878	2,214	4,698	2,145	4,903	2,260	4,381	2,009
Washington.....	1,241	559	1,206	534	1,500	667	1,393	620	1,331	600	1,312	591
Oregon.....	749	334	740	331	802	363	756	336	870	393	660	293
California and Hawaii.....	2,468	1,144	2,505	1,154	2,576	1,184	2,549	1,189	2,702	1,267	2,409	1,125
	June		May		April		March		February		January	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	50,430	22,328	49,488	22,127	49,946	22,381	51,695	23,076	47,296	21,078	49,976	22,292
Middle Atlantic.....	6,540	2,912	6,406	2,858	5,866	2,616	6,503	2,889	5,958	2,636	6,150	2,709
New York.....	5,131	2,287	4,983	2,226	4,538	2,027	5,019	2,240	4,660	2,072	4,725	2,097
North Central.....	27,924	12,311	27,549	12,275	28,187	12,580	28,991	12,892	26,624	11,798	27,611	12,186
Ohio.....	2,726	1,187	2,207	950	2,978	1,306	3,107	1,355	2,800	1,225	3,015	1,315
Indiana.....	1,248	520	1,292	548	1,186	504	1,421	603	1,120	478	1,361	571
Illinois.....	2,964	1,295	2,865	1,275	2,789	1,235	3,099	1,375	2,806	1,237	2,689	1,187
Michigan.....	744	322	741	325	739	328	809	358	704	310	742	325
Minnesota.....	5,681	2,554	5,595	2,527	5,730	2,585	6,015	2,702	5,880	2,656	5,835	2,620
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,304	1,923	4,424	1,989	4,266	1,924	4,198	1,899	3,875	1,744	4,184	1,874
Nebraska.....	1,917	821	1,899	826	1,900	823	2,114	917	1,764	762	1,857	803
Kansas.....	6,671	2,994	6,855	3,100	6,904	3,125	6,379	2,870	5,994	2,649	6,129	2,775
South Atlantic.....	2,889	1,267	2,959	1,361	3,026	1,360	2,993	1,341	2,888	1,307	2,964	1,431
East South Central.....	2,591	1,127	2,518	1,103	2,411	1,115	2,657	1,222	2,456	1,125	2,498	1,149
Tennessee.....	1,987	866	1,924	844	1,918	843	2,118	928	1,986	868	2,006	879
West South Central.....	3,474	1,569	3,297	1,470	3,384	1,510	3,205	1,427	2,944	1,311	3,058	1,358
Oklahoma.....	1,502	(D)	1,417	(D)	1,499	(D)	1,384	(D)	1,127	(D)	1,223	(D)
Texas.....	1,375	580	1,361	586	1,333	573	1,317	570	1,331	579	1,298	560
Mountain.....	2,878	1,247	2,570	1,139	2,623	1,158	2,768	1,225	2,471	1,093	3,125	1,382
Montana.....	616	278	589	271	590	267	594	270	542	245	597	269
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,134	1,895	4,189	1,921	4,449	2,042	4,578	2,080	3,955	1,808	4,570	2,077
Washington.....	1,123	511	1,128	515	1,189	545	1,292	581	1,090	490	1,378	620
Oregon.....	704	315	714	319	845	379	783	346	682	310	890	403
California and Hawaii.....	2,307	1,069	2,347	1,087	2,415	1,118	2,503	1,153	2,183	1,008	2,302	1,054

(D) Withheld to avoid disclosing figures for individual companies.

Table 2B. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES BY MONTH-1977 REVISED

(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	December		November		October		September		August		July	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	52,106	23,363	53,159	23,785	52,352	23,396	52,244	23,381	54,844	24,419	46,149	20,566
Middle Atlantic.....	7,143	3,158	7,207	3,426	7,017	3,144	7,328	3,295	7,302	3,265	5,992	2,691
New York.....	5,677	2,507	5,583	2,499	5,475	2,461	5,836	2,637	5,722	2,572	4,775	2,153
North Central.....	27,338	12,305	28,770	12,329	29,153	12,980	28,127	12,603	29,646	13,194	25,205	11,235
Ohio.....	3,195	1,398	2,985	1,303	3,155	1,381	2,848	1,246	3,121	1,354	2,537	1,085
Indiana.....	1,272	549	1,225	537	1,387	599	1,320	584	1,159	497	1,201	510
Illinois.....	2,594	1,148	3,215	1,424	3,254	1,435	3,193	1,416	3,460	1,522	2,666	1,158
Michigan.....	803	349	563	387	895	398	832	367	781	342	692	303
Minnesota.....	5,447	2,491	5,930	2,703	6,147	2,820	6,066	2,771	6,382	2,923	5,466	2,516
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,298	1,947	4,989	2,233	4,431	1,978	4,016	1,800	4,332	1,928	3,976	1,757
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1,881	833	1,486	656
Kansas.....	6,736	3,086	6,448	3,305	6,554	2,949	6,541	2,951	6,677	2,983	5,727	2,602
South Atlantic.....	4,182	1,831	3,318	1,654	2,966	1,331	3,189	1,379	3,484	1,500	2,790	1,198
East South Central.....	2,744	1,195	2,666	1,155	2,623	1,137	2,713	1,177	2,811	1,207	2,417	1,040
Tennessee.....	2,196	961	2,147	931	2,068	898	2,113	919	2,164	928	1,846	802
West South Central.....	3,431	1,548	3,405	1,653	3,252	1,455	3,239	1,448	3,528	1,586	2,990	1,343
Oklahoma.....	1,301	598	1,367	630	1,198	550	1,228	560	1,350	617	1,285	585
Texas.....	1,355	606	1,495	664	1,464	647	1,444	638	1,602	716	1,274	569
Mountain.....	2,981	1,353	3,044	1,381	2,805	1,267	2,968	1,337	3,017	1,354	2,628	1,177
Montana.....	704	331	772	367	673	319	770	363	763	359	581	274
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,287	1,973	4,749	2,187	4,536	2,082	4,680	2,142	5,056	2,313	4,127	1,882
Washington.....	1,123	510	1,321	597	1,261	570	1,282	579	1,394	627	1,133	511
Oregon.....	657	302	722	329	707	319	784	357	867	395	662	295
California and Hawaii.....	2,507	1,161	2,706	1,261	2,568	1,193	2,614	1,206	2,795	1,291	2,332	1,076
	June		May		April		March		February		January	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	49,072	21,769	49,688	22,121	49,184	21,877	57,635	25,787	50,840	22,716	50,852	22,604
Middle Atlantic.....	6,580	2,957	6,404	2,881	5,880	2,657	7,319	3,318	5,914	2,672	5,609	2,517
New York.....	5,213	2,353	4,895	2,211	4,500	2,043	5,782	2,629	4,489	2,038	4,228	1,905
North Central.....	26,606	11,764	27,047	12,019	27,493	12,193	31,708	14,176	28,566	12,778	28,732	12,795
Ohio.....	2,474	1,052	2,708	1,169	2,494	1,080	3,306	1,437	2,515	1,081	2,629	1,141
Indiana.....	1,291	547	1,064	454	1,307	547	1,472	626	1,231	516	1,236	520
Illinois.....	2,975	1,295	3,053	1,338	2,913	1,279	3,298	1,445	3,078	1,353	2,963	1,297
Michigan.....	765	337	761	333	770	338	907	398	696	305	682	296
Minnesota.....	5,715	2,602	5,329	2,428	5,568	2,546	6,420	2,958	5,936	2,748	5,966	2,730
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,189	1,862	4,415	1,960	4,388	1,958	5,054	2,360	4,739	2,117	4,675	2,081
Nebraska.....	1,714	754	1,893	839	1,712	765	1,997	894	1,929	867	1,768	787
Kansas.....	5,892	2,627	6,173	2,768	6,826	3,066	7,391	3,330	6,623	2,985	6,936	3,117
South Atlantic.....	3,110	1,332	3,228	1,390	2,833	1,276	3,556	1,534	3,073	1,326	2,886	1,235
East South Central.....	2,628	1,136	2,573	1,119	2,441	1,056	2,915	1,267	2,516	1,073	2,457	1,048
Tennessee.....	2,109	915	1,979	865	1,866	808	2,237	974	1,933	823	1,916	817
West South Central.....	3,344	1,490	3,262	1,463	3,279	1,421	3,728	1,666	3,518	1,566	3,531	1,559
Oklahoma.....	1,358	615	1,429	647	1,445	657	1,597	724	1,467	666	1,486	667
Texas.....	1,413	622	1,261	561	1,251	494	1,472	645	1,497	649	1,531	650
Mountain.....	2,564	1,153	2,592	1,162	2,688	1,205	3,033	1,362	2,583	1,165	2,785	1,242
Montana.....	552	266	612	288	633	300	784	371	659	316	667	307
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,240	1,937	4,582	2,087	4,570	2,069	5,376	2,464	4,670	2,136	4,852	2,208
Washington.....	1,096	497	1,234	560	1,371	614	1,646	743	1,387	623	1,448	645
Oregon.....	692	310	724	318	713	324	1,004	451	876	397	490	441
California and Hawaii.....	2,452	1,130	2,624	1,209	2,486	1,131	2,726	1,270	2,407	1,116	2,414	1,122

(D) Withheld to avoid disclosing figures for individual companies.

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Flour Milling Products

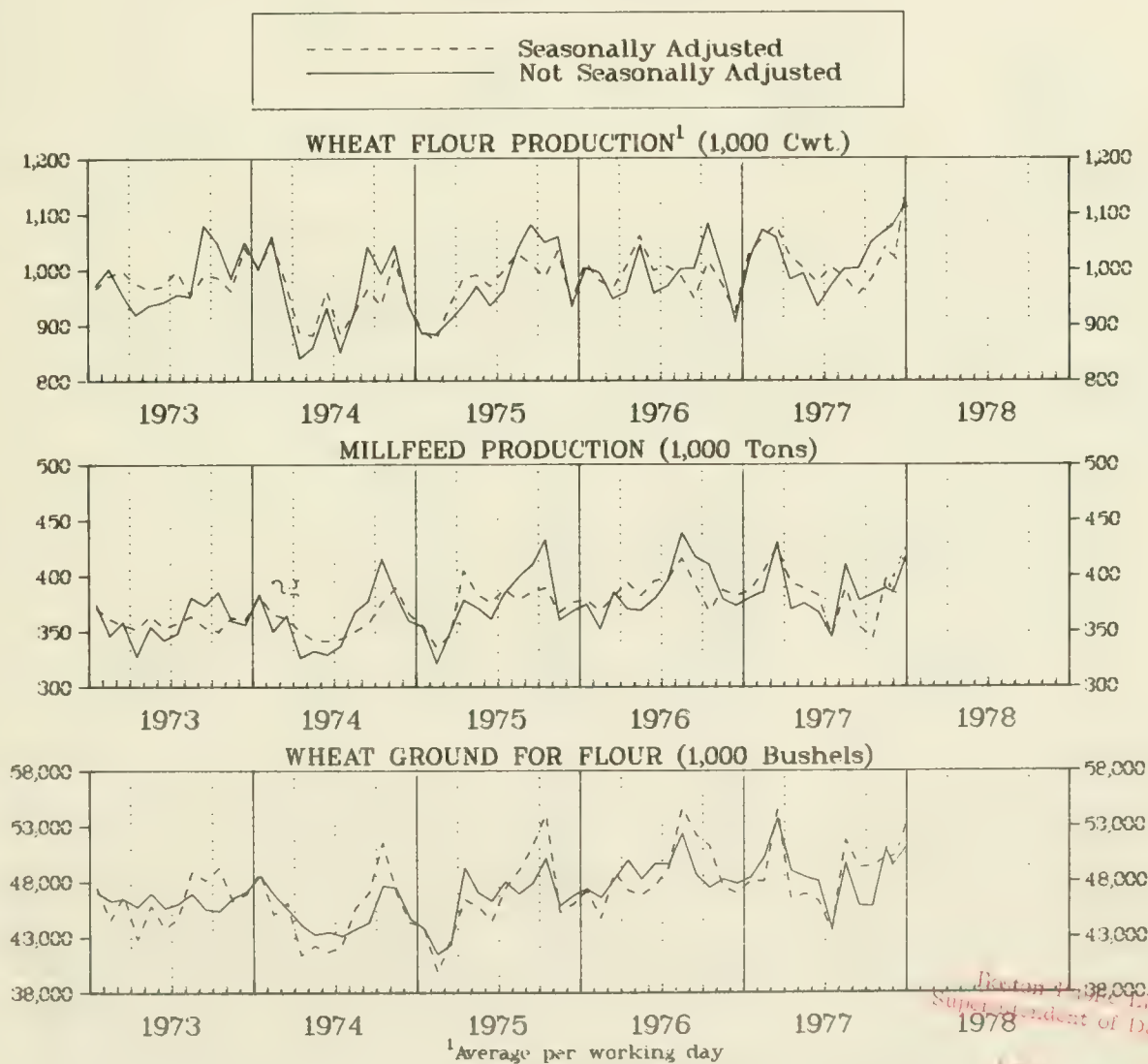
JANUARY 1978

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The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

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Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production ² (1,000 tons)	Wheat ground for flour (1,350 bushels)
1978			
January.....	1,065	387	47,369
1977			
December.....	1,137	421	53,169
November.....	1,139	421	51,034
October.....	988	387	45,796
September.....	954	355	45,821
August.....	985	389	43,628
July.....	1,004	387	43,693
June.....	977	382	48,088
May.....	1,002	387	48,419
April.....	1,024	393	48,949
March.....	1,079	426	53,682
February.....	1,057	404	50,128
January.....	1,027	387	47,369
1976			
December.....	922	382	47,848
November.....	874	387	48,209
October.....	1,014	387	47,466
September.....	960	392	48,672
August.....	988	415	52,331
July.....	1,005	398	49,569
June.....	998	387	49,630
May.....	1,060	382	48,254
April.....	1,005	382	49,939
March.....	988	381	48,218
February.....	980	387	47,369
January.....	1,012	387	47,366

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production ² (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ³ (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
January.....	1,031	21,661	381,172	48,474	(NA)	1,017	101.4	74.5
1977								
December.....	1,112	23,363	410,169	52,106	4,160	1,017	109.4	74.7
November.....	1,069	22,445	389,311	50,166	(NA)	968	110.4	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	1,002	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,732	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.3
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.4
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.2
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.2
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3

Note: Data include estimates for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

¹NA: Not available.

²The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

³Collected quarterly.

⁴Wheat flour production as compared with amount of wheat ground.

Table 1C.--COMBINED FINAL SEASONAL AND TRADING DAY FACTORS: 1976 TO 1978

Flour production	January	February	March	April	May	June	July	August	September	October	November	December
ONE YEAR AHEAD--1978												
Average per day.....	98.7	101.2	98.1	96.1	99.4	95.5	96.6	101.7	104.6	106.8	102.9	97.8
Millfeed production.....	98.0	95.3	101.0	94.3	96.4	96.0	99.9	105.3	106.6	111.7	97.8	95.5
Wheat grinding.....	99.1	95.8	101.4	94.9	96.8	96.2	99.8	104.1	107.6	107.9	98.3	98.0
1977												
Average production.....	98.8	101.3	98.0	95.9	99.1	95.6	96.6	101.6	105.0	106.8	102.9	97.8
Millfeed production.....	98.3	95.4	101.0	94.1	96.5	96.0	99.8	105.4	106.6	111.7	97.8	97.5
Wheat grinding.....	99.3	95.8	101.4	94.8	96.8	96.2	99.6	104.2	107.5	107.9	98.3	98.0
1976												
Average production.....	99.0	101.5	98.0	95.5	98.5	95.9	96.5	101.3	105.9	106.7	102.8	98.2
Millfeed production.....	98.9	95.6	101.0	93.9	96.6	95.9	99.5	105.5	106.5	111.5	97.9	97.6
Wheat grinding.....	99.7	95.9	101.3	94.5	96.9	96.0	99.4	104.4	107.3	107.9	98.5	98.1

Table 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of Measure	January 1978	December 1977	January 1977
0011173	Durum wheat (included in table 1 data):				
2041153	Durum wheat ground.....	M bu.....	3,419	3,214	3,278
2041153	Straight semolina durum flour.....	M cwt.....	1,505	1,427	1,466
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
0011951	Rye:				
2041611	Rye ground for flour.....	M bu.....	308	334	305
2041611	Rye flour production.....	M cwt.....	143	153	140
2041618	Rye millfeed production.....	Tons.....	1,808	1,788	1,751
2041611	Rye flour stocks ¹	M cwt.....	(NA)	24	(NA)
	24 hour capacity ¹.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.
¹Collected quarterly.

Table 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	January 1978		December 1977		January 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	48,474	21,661	52,106	23,363	44,674	21,469
Middle Atlantic.....	6,088	2,694	7,143	3,158	5,571	2,488
New York.....	4,905	2,162	5,677	2,507	4,660	2,038
North Central.....	25,766	11,979	27,338	12,305	25,447	12,232
Ohio.....	2,391	1,033	3,195	1,398	2,800	1,081
Indiana.....	1,146	497	1,272	549	1,120	516
Illinois.....	2,593	1,161	2,594	1,148	2,806	1,353
Michigan.....	735	322	803	349	704	305
Minnesota.....	5,800	2,646	5,447	2,491	5,880	2,748
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,382	1,978	4,298	1,947	3,875	2,117
Nebraska.....	(D)	(D)	(D)	(D)	1,356	661
Kansas.....	6,386	2,889	6,736	3,086	5,225	2,607
South Atlantic.....	2,853	1,229	4,182	1,831	2,475	1,122
East South Central.....	2,673	1,101	2,744	1,195	2,456	1,073
Tennessee.....	2,127	869	2,196	941	1,986	823
West South Central.....	3,277	1,489	3,431	1,548	2,652	1,425
Oklahoma.....	1,396	645	1,301	598	1,127	666
Texas.....	1,418	641	1,355	606	1,331	649
Mountain.....	2,676	1,214	2,981	1,353	2,471	1,165
Montana.....	619	287	704	331	542	316
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,229	1,955	4,287	1,973	3,602	1,964
Washington.....	1,150	517	1,123	510	1,090	623
Oregon.....	692	319	657	302	682	402
California and Hawaii.....	2,387	1,119	2,507	1,161	1,830	939

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	December 1977	November 1977	12 months through December 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110) (1,000 cwt.)			
Total.....	274	148	3,615
Egypt.....	29	-	809
Guatemala.....	-	-	85
Colombia.....	-	2	95
Ecuador.....	-	-	6
Brazil.....	4	-	9
Israel.....	-	-	105
India.....	1	6	59
Chile.....	48	25	237
Sri Lanka (Ceylon).....	-	-	112
Philippine Republic.....	30	-	200
Morocco.....	96	62	718
Other.....	67	53	1,180
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120) (1,000 cwt.)			
Total.....	1,219	762	17,886
Nicaragua.....	2	5	31
Jamaica.....	268	6	495
Brazil.....	-	-	22
Iceland.....	3	7	75
Jordan.....	22	-	132
Saudi Arabia.....	651	339	4,884
Sri Lanka (Ceylon).....	10	13	4,396
Egypt.....	-	-	5,809
Philippine Republic.....	-	-	13
Korean Republic.....	-	-	1
Morocco.....	-	-	-
Other.....	263	392	2,028
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (0410020) (1,000 bu.)			
Total.....	86,691	56,667	863,920
U.S.S.R.....	14,201	10,560	110,838
Venezuela.....	2,713	1,505	24,249
Peru.....	-	146	15,567
Brazil.....	7,210	2,605	25,772
Portugal.....	-	-	19,576
Iran.....	2,317	1,324	45,083
Indonesia.....	1,448	1,345	16,611
Korean Republic.....	8,747	525	65,993
China (Taiwan).....	3,955	1,396	20,197
Japan.....	1,277	2,611	121,808
Egypt.....	2,363	2,624	49,044
Nigeria.....	2,276	1,580	24,739
Other.....	40,184	30,446	324,443

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are as follows: 0460110, wheat flour (except meal and groats); 0460120, wheat flour (wholly of U.S. wheat, except durum flour and semolina); 0410020, wheat, including spelt or meslin, unmilled, not donated for relief or charity.

- Represents zero.

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Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

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M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

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Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
February.....	1,055	394	50,320
January.....	1,061	388	48,870
1977			
December.....	1,137	421	53,169
November.....	1,039	398	51,034
October.....	983	343	45,796
September.....	954	355	45,821
August.....	985	389	49,628
July.....	1,004	345	43,693
June.....	976	382	48,088
May.....	1,002	389	48,419
April.....	1,024	393	48,444
March.....	1,079	426	53,682
February.....	1,057	404	50,128
January.....	1,027	387	48,374
1976			
December.....	922	382	47,848
November.....	974	387	48,284
October.....	1,014	368	47,466
September.....	946	392	48,882
August.....	988	415	52,331
July.....	1,005	398	49,584
June.....	998	395	49,830
May.....	1,060	382	48,254
April.....	1,005	394	49,433
March.....	966	381	48,218
February.....	980	368	46,584

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ³ (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ⁴ (percent)
	Average per working day ¹	Calendar month total						
1978								
February.....	1,041	21,328	375,078	48,207	NA ¹	1,017	102.4	74.3
January.....	1,038	21,787	380,717	48,430	NA	1,017	102.2	74.3
1977								
December.....	1,112	23,363	410,169	52,106	4,160	1,017	109.4	74.7
November.....	1,069	22,445	389,311	50,166	(NA)	968	110.4	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	1,002	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	991	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,162	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	52,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3
February.....	995	19,891	351,557	46,674	(NA)	991	100.4	74.2

Note: Data include estimates for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

Table 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	February 1978	January 1978	February 1977
	DURUM WHEAT (Included in table 1 data):				
0011173	Durum wheat ground.....	M bu.....	3,236	3,454	3,548
2041153	Straight semolina durum flour.....	M cwt.....	1,438	1,506	1,511
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	RYE:				
0011951	Rye ground for flour.....	M bu.....	304	322	302
2041611	Rye flour production.....	M cwt.....	136	147	130
2041618	Rye millfeed production...	Tons.....	1,772	1,802	1,410
2041611	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity ¹.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

Table 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundred weight)

Geographic area	February 1978		January 1978		February 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	48,207	21,328	48,430	21,787	48,023	21,425
Middle Atlantic.....	6,281	2,779	6,087	2,692	5,523	2,488
New York.....	5,089	2,248	4,897	2,162	4,489	2,038
North Central.....	26,672	11,786	26,579	12,106	27,288	12,194
Ohio.....	2,611	1,119	2,389	1,032	2,515	1,081
Indiana.....	1,092	472	1,148	498	1,231	516
Illinois.....	2,863	1,265	2,628	1,177	3,078	1,353
Michigan.....	834	355	733	321	696	305
Minnesota.....	5,391	2,346	5,904	2,683	5,936	2,748
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,268	1,909	3,882	1,978	4,739	2,117
Nebraska.....	(D)	727	(D)	(D)	1,485	661
Kansas.....	6,383	2,880	6,650	2,964	5,789	2,607
South Atlantic.....	2,937	1,261	2,841	1,220	2,626	1,121
East South Central.....	2,487	1,023	2,674	1,101	2,516	1,073
Tennessee.....	1,943	795	2,128	869	1,933	823
West South Central.....	3,362	1,512	3,280	1,486	3,202	1,425
Oklahoma.....	1,383	634	1,396	645	1,467	666
Texas.....	1,559	692	1,421	638	1,497	649
Mountain.....	2,543	1,175	2,676	1,214	2,583	1,165
Montana.....	621	319	619	287	659	316
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	3,925	1,792	4,293	1,968	4,285	1,959
Washington.....	1,070	481	1,150	517	1,387	623
Oregon.....	634	291	721	330	876	397
California and Hawaii.....	2,221	1,020	2,422	1,121	2,022	939

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	January 1978	December 1977	1 month through January 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	146	146	146
Egypt.....	63	29	63
Guatemala.....	-	-	-
Colombia.....	-	-	-
Ecuador.....	-	-	-
Brazil.....	-	4	-
Israel.....	42	-	42
India.....	13	1	13
Chile.....	-	48	-
Sri Lanka (Ceylon).....	-	-	-
Philippine Republic.....	-	30	-
Morocco.....	-	96	-
Other.....	28	67	28
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	506	1,219	506
Nicaragua.....	20	2	20
Jamaica.....	5	268	5
Brazil.....	-	-	-
Iceland.....	2	3	2
Jordan.....	-	22	-
Saudi Arabia.....	175	651	175
Sri Lanka (Ceylon).....	-	10	-
Egypt.....	190	-	190
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	114	263	114
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	64,567	86,691	64,567
U.S.S.R.....	12,095	14,201	12,095
Venezuela.....	1,623	2,713	1,623
Peru.....	-	-	-
Brazil.....	5,929	7,210	5,929
Portugal.....	2,990	-	2,990
Iran.....	6,283	2,317	6,283
Indonesia.....	955	1,448	955
Korean Republic.....	3,180	8,747	3,180
China (Taiwan).....	-	3,955	-
Japan.....	8,477	1,277	8,477
Egypt.....	-	2,363	-
Nigeria.....	1,571	2,276	1,571
Other.....	21,464	40,184	21,464

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are shown above.

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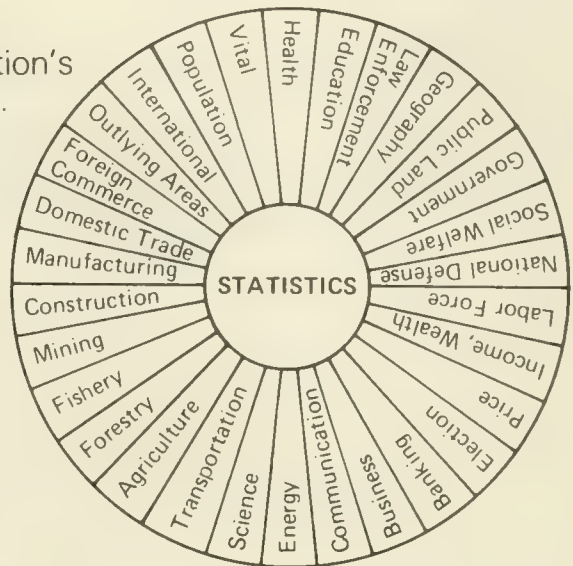
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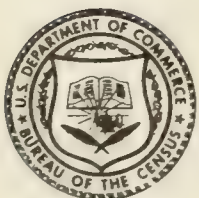
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Flour Milling Products

MARCH 1978

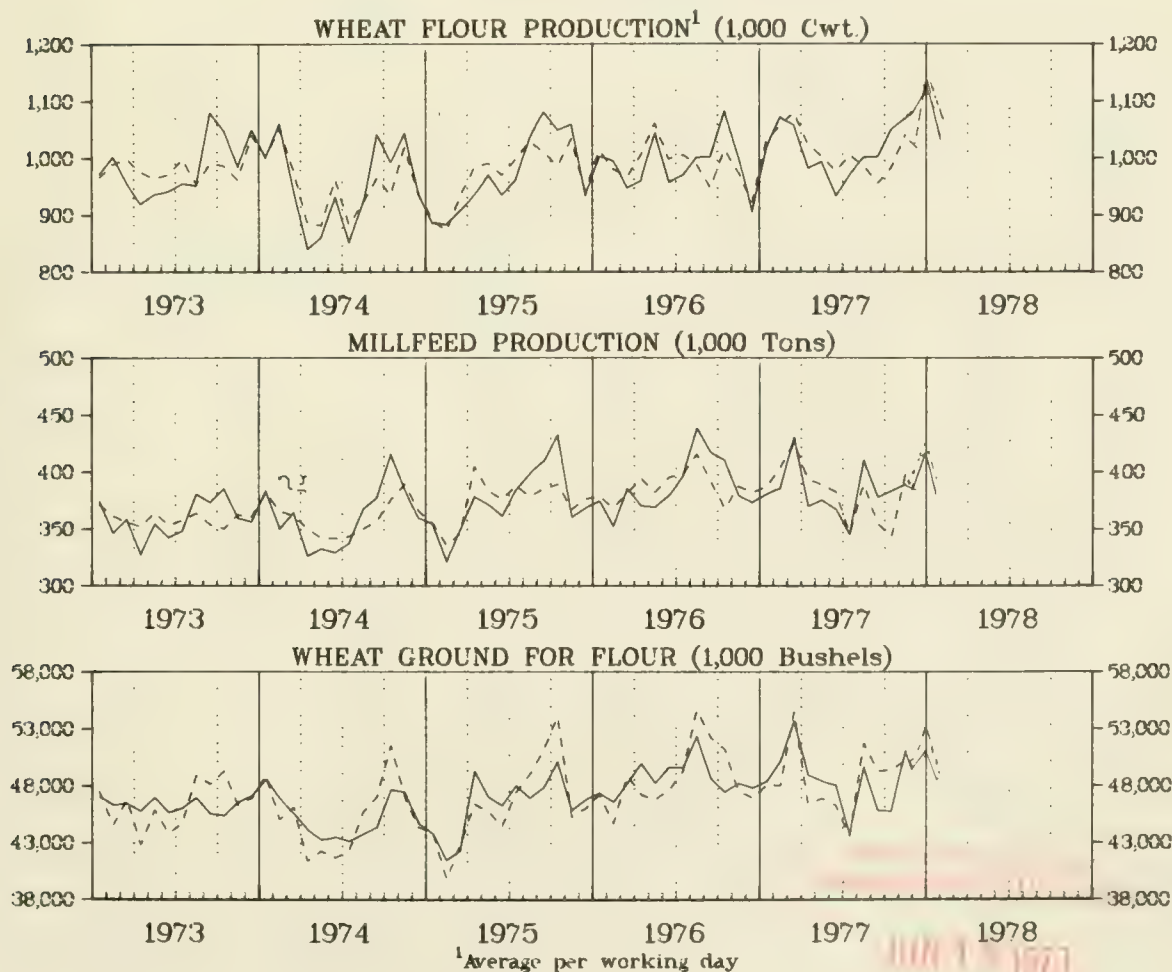
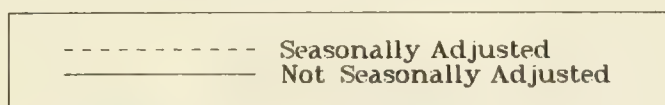
M20A(78)-3

Issued May 1978

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
March.....	1,099	428	54,580
February.....	1,071	404	51,054
January.....	1,061	388	48,870
1977			
December.....	1,137	421	53,169
November.....	1,039	398	51,034
October.....	983	343	45,796
September.....	954	355	45,821
August.....	985	389	49,628
July.....	1,004	346	43,693
June.....	976	382	48,088
May.....	1,002	389	48,419
April.....	1,024	393	48,949
March.....	1,079	426	53,682
February.....	1,057	404	50,128
January.....	1,027	387	48,374
1976			
December.....	922	382	47,848
November.....	974	387	48,209
October.....	1,014	368	47,474
September.....	946	392	48,672
August.....	988	415	52,331
July.....	1,005	398	44,569
June.....	998	395	44,630
May.....	1,060	382	48,254
April.....	1,005	394	49,334
March.....	966	381	48,218

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ¹ (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
March.....	1,079	24,839	432,591	55,344	4,096	1,009	107.0	74.8
February.....	1,084	21,783	385,269	48,910	(NA)	1,017	106.6	74.2
January.....	1,038	21,787	380,717	48,430	(NA)	1,017	102.2	74.9
1977								
December.....	1,112	23,363	410,169	52,106	4,160	1,017	109.4	74.7
November.....	1,069	22,445	389,311	50,166	(NA)	968	110.4	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	1,002	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,132	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3

Note: Data include estimates for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

Table 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	March 1978	February 1978	March 1977
	DURUM WHEAT (Included in table 1 data):				
0011173	Durum wheat ground.....	M bu.....	3,329	3,285	3,730
2041153	Straight semolina durum flour.....	M cwt.....	1,476	1,460	1,632
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	RYE:				
0011951	Rye ground for flour.....	M bu.....	291	298	316
2041611	Rye flour production.....	M cwt.....	128	131	141
2041618	Rye millfeed production....	Tons.....	1,543	1,674	1,690
2041611	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	29
	24 hour capacity ¹.....	..do.....	14	14	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

Table 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundred weight)

Geographic area	March 1978		February 1978		March 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	55,344	24,839	48,910	21,783	54,434	24,321
Middle Atlantic.....	7,067	3,142	6,573	2,916	6,875	3,109
New York.....	5,413	2,408	5,155	2,284	5,782	2,629
North Central.....	30,160	13,602	26,825	12,003	30,304	13,536
Ohio.....	3,003	1,325	2,611	1,133	3,306	1,437
Indiana.....	1,325	573	1,092	473	1,472	626
Illinois.....	3,307	1,465	3,011	1,330	3,298	1,445
Michigan.....	936	402	840	357	907	398
Minnesota.....	6,168	2,808	5,391	2,346	6,420	2,958
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	5,091	2,347	4,321	1,934	5,054	2,260
Nebraska.....	(D)	(D)	(D)	(D)	1,493	660
Kansas.....	6,820	3,108	6,223	2,939	6,443	2,901
South Atlantic.....	3,642	1,578	3,243	1,438	3,000	1,278
East South Central.....	2,775	1,203	2,420	1,024	2,915	1,267
Tennessee.....	2,176	949	1,876	796	2,237	974
West South Central.....	3,837	1,718	3,406	1,458	3,369	1,506
Oklahoma.....	1,606	733	1,383	634	1,597	724
Texas.....	1,668	736	1,566	647	1,472	645
Mountain.....	3,099	1,399	2,543	1,175	3,033	1,362
Montana.....	721	341	621	319	784	371
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,764	2,197	3,900	1,769	4,938	2,263
Washington.....	1,384	627	1,070	481	1,646	743
Oregon.....	729	336	634	291	1,004	451
California and Hawaii.....	2,651	1,234	2,196	997	2,288	1,069

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	February 1978	January 1978	2 months through February 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	134	146	280
Egypt.....	7	63	70
Guatemala.....	-	-	-
Colombia.....	9	-	9
Ecuador.....	2	-	2
Brazil.....	-	-	-
Israel.....	2	42	44
India.....	-	13	13
Chile.....	33	-	33
Sri Lanka (Ceylon).....	-	-	-
Philippine Republic.....	73	-	73
Morocco.....	-	-	-
Other.....	8	28	36
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA ,1314040) (1,000 cwt.)			
Total.....	1,480	506	1,986
Nicaragua.....	-	2	2
Jamaica.....	258	5	263
Brazil.....	-	-	-
Iceland.....	8	2	10
Jordan.....	-	-	-
Saudi Arabia.....	348	175	523
Sri Lanka (Ceylon).....	-	-	-
Egypt.....	603	190	793
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	263	132	395
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	94,539	64,567	159,106
U.S.S.R.....	14,703	12,095	26,798
Venezuela.....	1,469	1,623	3,092
Peru.....	-	-	-
Brazil.....	8,715	5,929	14,644
Portugal.....	3,125	2,990	6,115
Iran.....	2,534	6,283	8,817
Indonesia.....	-	955	955
Korean Republic.....	9,923	3,180	13,103
China (Taiwan).....	3,009	-	3,009
Japan.....	14,032	8,477	22,509
Egypt.....	5,023	-	5,023
Nigeria.....	2,645	1,571	4,216
Other.....	29,361	21,464	50,825

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5.--PRODUCTION, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: FEBRUARY 1978

Product	Quantity produced (1,000 cwt.)	Exports of domestic merchandise	Imports for consumption	Apparent consumption	Percent, imports to apparent consumption
Wheat flour.....	21,783	1,614	(X)	20,169	(X)

(X) Not applicable.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Data prior to December 1977, shown in this publication, are not comparable to the current data due to an extensive review and updating of the mailing panel. The revisions will be shown in the Summary for 1977 to be issued later this year.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are “imputed” from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12-percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the

effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, “What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?”, the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) *Valuation*—Domestic producers’ shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition values at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters’ trade margin above costs increases the export values compared with producers’ values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and

other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values; etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of

those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

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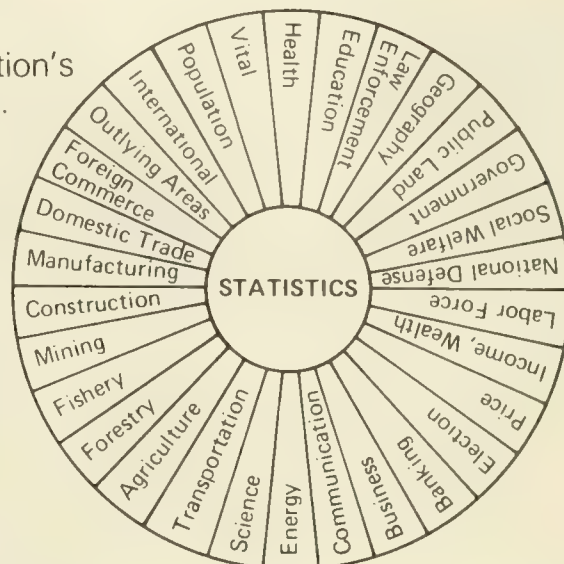
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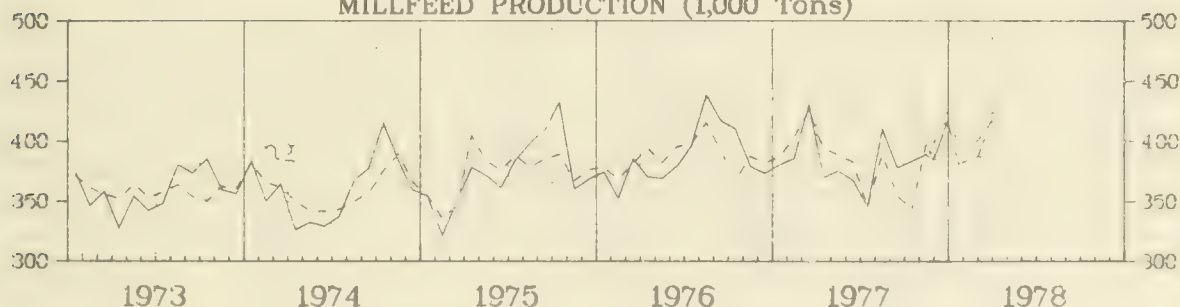
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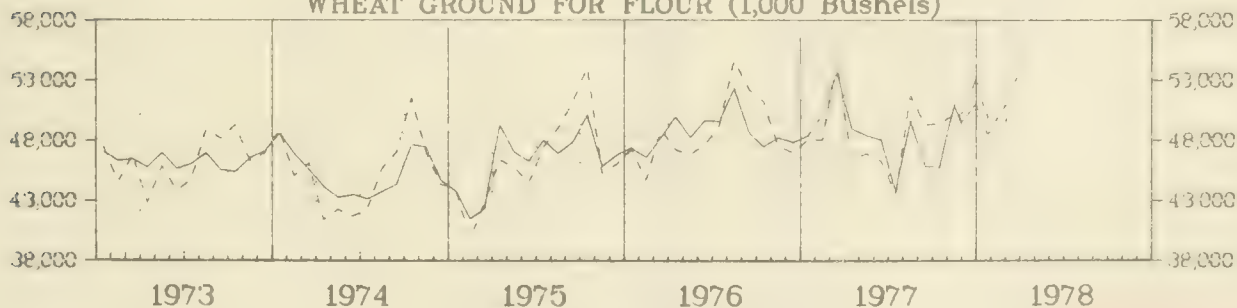
WHEAT FLOUR MILLING 1973 TO 1978

----- Seasonally Adjusted
———— Not Seasonally Adjusted

MILLFEED PRODUCTION (1,000 Tons)



WHEAT GROUND FOR FLOUR (1,000 Bushels)



¹Average per working day

Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

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Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Millfeed production (1,000 tons)	Wheat ground for flour 1,000 bushels
1978		
April.....	410	53,442
March.....	426	54,064
February.....	404	51,054
January.....	388	48,870
1977		
December.....	421	53,169
November.....	398	51,034
October.....	343	45,796
September.....	355	45,821
August.....	389	49,628
July.....	346	43,693
June.....	382	48,088
May.....	389	48,419
April.....	393	48,949
March.....	426	53,682
February.....	404	50,128
January.....	387	48,374
1976		
December.....	382	47,848
November.....	387	48,209
October.....	368	47,466
September.....	392	48,672
August.....	415	52,331
July.....	398	49,569
June.....	395	49,630
May.....	382	48,254
April.....	394	49,939

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)	Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ¹ (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
1978							
April.....	22,946	386,366	50,716	(NA)	1,009	108.3	75.4
March.....	24,330	430,260	54,821	4,096	1,009	114.8	73.8
February.....	21,783	385,269	48,910	(NA)	1,017	108.2	74.2
January.....	21,787	380,717	48,430	(NA)	1,017	102.2	74.9
1977							
December.....	23,363	410,169	52,106	4,160	1,017	109.4	74.7
November.....	22,445	389,311	50,166	(NA)	968	110.4	74.8
October.....	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	22,039	378,118	49,258	3,537	968	113.1	74.8
August.....	23,023	410,232	51,712	(NA)	957	104.6	74.1
July.....	19,393	348,584	43,518	(NA)	957	101.3	74.3
June.....	20,529	366,513	46,261	4,167	957	97.5	74.8
May.....	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976							
December.....	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	21,751	395,596	49,272	(NA)	990	100.1	73.8
June.....	21,059	378,582	47,645	3,923	990	98.7	73.7
May.....	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	21,113	369,972	47,192	(NA)	997	96.3	74.5

Notes: Data include estimates for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies are for approximately 1.5 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	April 1978	March 1978	April 1977
	DURUM WHEAT (Included in table 1 data):				
0011173	Durum wheat ground.....	M bu.....	2,242	3,326	2,679
2041153	Straight semolina durum flour.....	M cwt.....	996	1,476	1,131
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	D
	RYE:				
0011951	Rye ground for flour.....	M bu.....	284	291	282
2041611	Rye flour production.....	M cwt.....	126	128	135
2041618	Rye millfeed production...	Tons.....	1,591	1,543	1,413
2041611	Rye flour stocks ¹	M cwt.....	(NA)	30	(NA)
	24 hour capacity ¹.....	..do.....	10	16	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

Table 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	April 1978		March 1978		April 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	50,716	22,946	54,821	24,330	46,402	20,632
Middle Atlantic.....	5,829	2,655	6,895	2,841	5,494	2,480
New York.....	4,549	2,081	5,417	2,451	4,500	2,043
North Central.....	28,184	12,864	29,741	13,330	26,203	11,678
Ohio.....	2,744	1,211	3,000	1,325	2,494	1,080
Indiana.....	1,273	569	1,323	570	1,307	547
Illinois.....	3,222	1,385	3,165	1,414	2,913	1,279
Michigan.....	902	377	971	406	770	338
Minnesota.....	5,672	2,579	6,168	2,808	5,568	2,546
Iowa.....	D	D	(D)	D	D	(D)
Missouri.....	4,263	2,144	5,069	2,346	4,388	1,958
Nebraska.....	(D)	(D)	(D)	(D)	1,274	566
Kansas.....	7,105	3,213	6,711	2,955	6,002	2,702
South Atlantic.....	2,934	1,316	3,477	1,525	2,392	1,030
East South Central.....	2,537	1,112	2,835	1,244	2,441	1,056
Tennessee.....	2,046	899	2,252	990	1,866	808
West South Central.....	3,637	1,542	3,837	1,719	2,995	1,285
Oklahoma.....	1,531	710	1,606	733	1,445	657
Texas.....	1,600	611	1,668	737	1,251	494
Mountain.....	2,804	1,303	3,070	1,399	2,688	1,205
Montana.....	629	300	721	341	633	300
Utah.....	D	(D)	D	D	D	D
Pacific.....	4,791	2,154	4,966	2,272	4,189	1,898
Washington.....	1,442	634	1,407	634	1,371	614
Oregon.....	769	333	798	358	713	324
California and Hawaii.....	2,580	1,187	2,761	1,280	2,105	960

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	March 1978	February 1978	3 months through March 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	130	134	460
Egypt.....	15	7	85
Guatemala.....	6	-	6
Colombia.....	7	9	16
Ecuador.....	-	2	2
Brazil.....	-	-	-
Israel.....	-	2	44
India.....	18	-	31
Chile.....	23	33	56
Sri Lanka (Ceylon).....	44	-	44
Philippine Republic.....	-	73	73
Morocco.....	22	-	22
Other.....	45	8	81
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA ,1314040) (1,000 cwt.)			
Total.....	1,588	1,480	3,574
Nicaragua.....	-	-	2
Jamaica.....	26	258	289
Brazil.....	-	-	-
Iceland.....	2	8	12
Jordan.....	-	-	-
Saudi Arabia.....	127	348	650
Sri Lanka (Ceylon).....	-	-	-
Egypt.....	901	603	1,694
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	532	263	927
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	103,316	94,539	262,422
U.S.S.R.....	12,307	14,703	39,105
Venezuela.....	2,050	1,469	5,142
Peru.....	944	-	944
Brazil.....	9,355	8,715	23,999
Portugal.....	3,999	3,125	10,114
Iran.....	3,535	2,534	12,352
Indonesia.....	1,242	-	2,197
Korean Republic.....	5,776	9,923	18,879
China (Taiwan).....	1,017	3,009	4,026
Japan.....	6,665	14,032	29,174
Egypt.....	7,211	5,023	12,234
Nigeria.....	1,981	2,645	6,197
Other.....	47,234	29,361	98,059

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5.--PRODUCTION, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: MARCH 1978

Product	Quantity produced (1,000 cwt.)	Exports of domestic merchandise	Imports for consumption	Apparent consumption	Percent, imports to apparent consumption
Wheat flour.....	24,330	1,768	(X)	22,662	(X)

(X) Not applicable.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Data prior to December 1977, shown in this publication, are not comparable to the current data due to an extensive review and updating of the mailing panel. The revisions will be shown in the Summary for 1977 to be issued later this year.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are “imputed” from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12-percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the

effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, “What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?”, the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) **Valuation**—Domestic producers’ shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition valued at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters’ trade margin above costs increases the export values compared with producers’ values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and

other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values; etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of

those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products

Foreign Trade Reports

FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
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Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census publication	Daisy Williams	(301) 763-7472
To order microfilm of Census publications	Theresa Allen	(301) 763-5042



COUNTY BUSINESS PATTERNS 1976

Transportation and other
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Retail trade
Finance, insurance, and
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Services

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Published CBP data, by county and by industry, will be available at cost, on computer tapes. Inquiries should be addressed to Chief, Data User Services Division, Bureau of the Census, Washington, D.C. 20233.

The reports described in this announcement are also available on microfiche. For further information, contact: Census Library, Washington, D.C. 20233

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of establishments, employment, and payroll data are also provided by employment-size class to the 4-digit SIC level. Also included, by major industry group, are data on the number of establishments, employees, and payroll of administrative and auxiliary establishments.

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The individual State reports present for the State, number of establishments, employment, and payroll data by employment-size class to the 4-digit SIC level. Also included, by major industry group, are data on the number of establishments with 1,000 or more employees, by employment-size class

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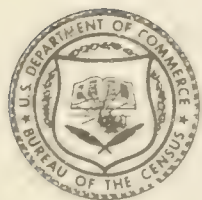
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Flour Milling Products

U.S. Department of Commerce
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MAY 1978

M20A(78)-5
Issued July 1978

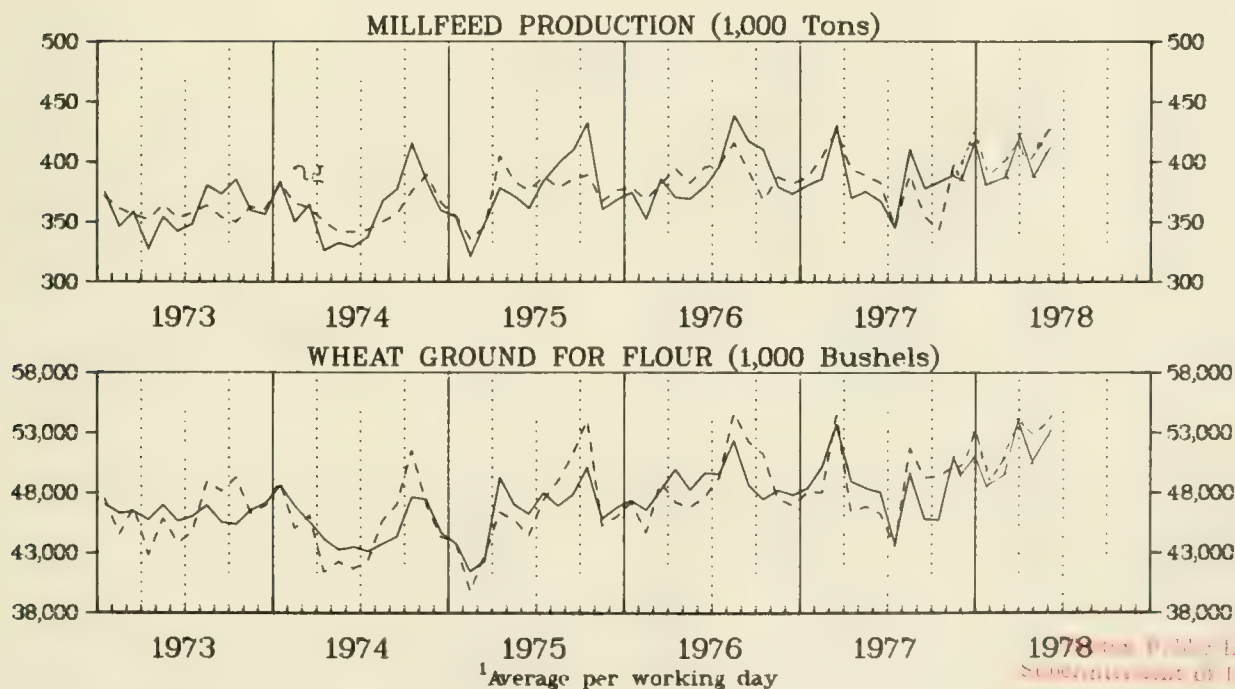
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THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978

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AUG 23 1978

DEPOSITORY

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(Seasonally adjusted)

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August.....	23,023	410,232	51,712	(NA)	987	
July.....	19,393	344,584	43,518	(NA)	957	
June.....	20,529	366,513	46,261	4,167	957	
May.....	20,861	375,128	46,870	(NA)	976	
April.....	20,632	369,798	46,402	(NA)	976	
March.....	24,321	430,120	54,434	4,248	976	
February.....	21,425	385,212	48,023	(NA)	990	
January.....	21,320	380,273	48,035	(NA)	990	
1976						
December.....	20,804	372,844	46,931	4,334	990	
November.....	21,031	379,784	47,486	(NA)	980	
October.....	22,723	410,072	51,216	(NA)	998	
September.....	23,178	417,142	52,225	3,621	998	
August.....	24,257	437,548	54,934	(NA)	990	
July.....	21,751	395,596	49,272	(NA)	990	
June.....	21,059	378,582	47,645	3,923	990	
May.....	20,871	369,318	46,758	(NA)	997	

(NA) Not available.

¹Collected quarterly.²Wheat flour production as compared with amount of wheat ground.

Table 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	May 1978	April 1978	May 1977
	DURUM WHEAT (Included in table 1 data):				
0011173	Durum wheat ground.....	M bu.....	240	2,237	2,657
2041153	Straight semolina durum flour.....	M cwt.....	1,045	993	1,125
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	RYE:				
0011951	Rye ground for flour.....	M bu.....	293	284	272
2041611	Rye flour production.....	M cwt.....	146	126	126
2041618	Rye millfeed production....	Tons.....	1,410	1,591	1,396
2041611	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity ¹.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

Table 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	May 1978		April 1978		May 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	53,541	24,016	50,478	22,554	46,870	20,861
Middle Atlantic.....	6,535	3,000	5,812	2,694	6,014	2,702
New York.....	5,137	2,380	4,549	2,125	4,895	2,211
North Central.....	29,100	12,981	28,057	12,517	25,773	11,450
Ohio.....	2,693	1,184	2,744	1,211	2,708	1,169
Indiana.....	1,123	497	1,266	569	1,064	454
Illinois.....	3,278	1,392	3,222	1,369	3,053	1,338
Michigan.....	919	381	902	344	761	333
Minnesota.....	6,136	2,795	5,672	2,579	5,329	2,428
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,523	2,034	4,263	^r 1,912	4,415	1,960
Nebraska.....	(D)	(D)	(D)	(D)	1,451	638
Kansas.....	7,023	3,158	6,985	3,177	5,341	2,400
South Atlantic.....	3,036	1,346	2,934	1,316	2,781	1,189
East South Central.....	2,853	1,250	2,537	1,118	2,573	1,119
Tennessee.....	2,240	985	2,046	905	1,979	865
West South Central.....	3,829	1,678	3,637	1,542	2,944	1,325
Oklahoma.....	1,574	727	1,531	710	1,429	647
Texas.....	1,751	733	1,600	611	1,261	561
Mountain.....	2,986	1,367	2,918	1,291	2,592	1,162
Montana.....	763	366	627	288	612	288
Utah.....	(D)	(D)	(D)	597	(D)	(D)
Pacific.....	5,202	2,394	4,583	2,076	4,193	1,914
Washington.....	1,673	755	1,404	632	1,234	560
Oregon.....	799	349	769	324	724	318
California and Hawaii.....	2,730	1,290	2,410	1,120	2,235	1,036

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	April 1978	March 1978	4 months through April 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	251	130	711
Egypt.....	144	15	229
Guatemala.....	-	6	6
Colombia.....	-	7	16
Ecuador.....	-	-	2
Brazil.....	-	-	-
Israel.....	13	-	57
India.....	-	18	31
Chile.....	-	23	56
Sri Lanka (Ceylon).....	-	44	44
Philippine Republic.....	-	-	73
Morocco.....	55	22	77
Other.....	39	45	120
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA ,1314040) (1,000 cwt.)			
Total.....	2,462	1,588	6,036
Nicaragua.....	2	-	4
Jamaica.....	10	26	299
Brazil.....	-	-	-
Iceland.....	-	2	12
Jordan.....	-	-	-
Saudi Arabia.....	459	127	1,109
Sri Lanka (Ceylon).....	396	-	396
Egypt.....	1,233	901	2,927
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	362	532	1,289
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	101,821	103,316	364,243
U.S.S.R.....	23,075	12,307	62,180
Venezuela.....	1,140	2,050	6,282
Peru.....	2,723	944	3,667
Brazil.....	12,501	9,355	36,500
Portugal.....	1,157	3,999	11,271
Iran.....	3,691	3,535	16,043
Indonesia.....	220	1,242	2,417
Korean Republic.....	3,491	5,776	22,370
China (Taiwan).....	1,947	1,017	5,973
Japan.....	10,739	6,665	39,913
Egypt.....	4,777	7,211	17,011
Nigeria.....	2,735	1,981	8,932
Other.....	33,625	47,234	131,684

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5.--PRODUCTION, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: APRIL 1978

Product	Quantity produced (1,000 cwt.)	Exports of domestic merchandise	Imports for consumption	Apparent consumption	Percent, imports to apparent consumption
Wheat flour.....	22,554	2,713	(X)	19,841	(X)

(X) Not applicable.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Data prior to December 1977, shown in this publication, are not comparable to the current data due to an extensive review and updating of the mailing panel. The revisions will be shown in the Summary for 1977 to be issued later this year.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are “imputed” from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12-percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the

effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, “What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?”, the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) **Valuation**—Domestic producers’ shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition valued at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters’ trade margin above costs increases the export values compared with producers’ values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and

other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values; etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of

those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used and rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

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Current Industrial Reports

M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
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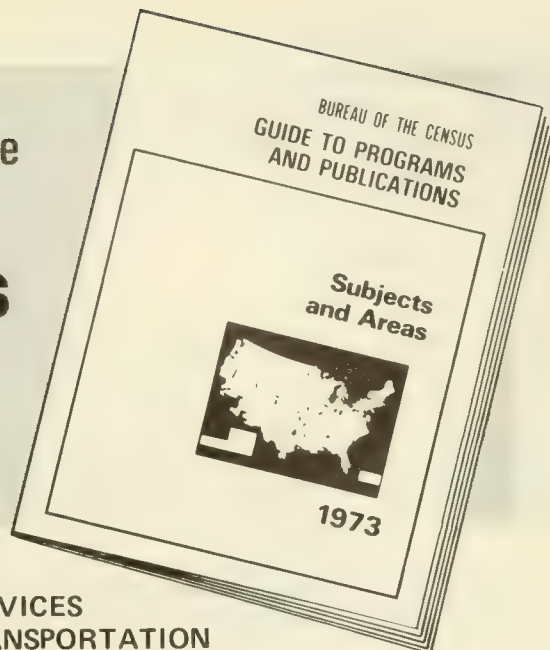
Foreign Trade Reports

FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
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Flour Milling Products

JUNE 1978



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M20A(78)-6
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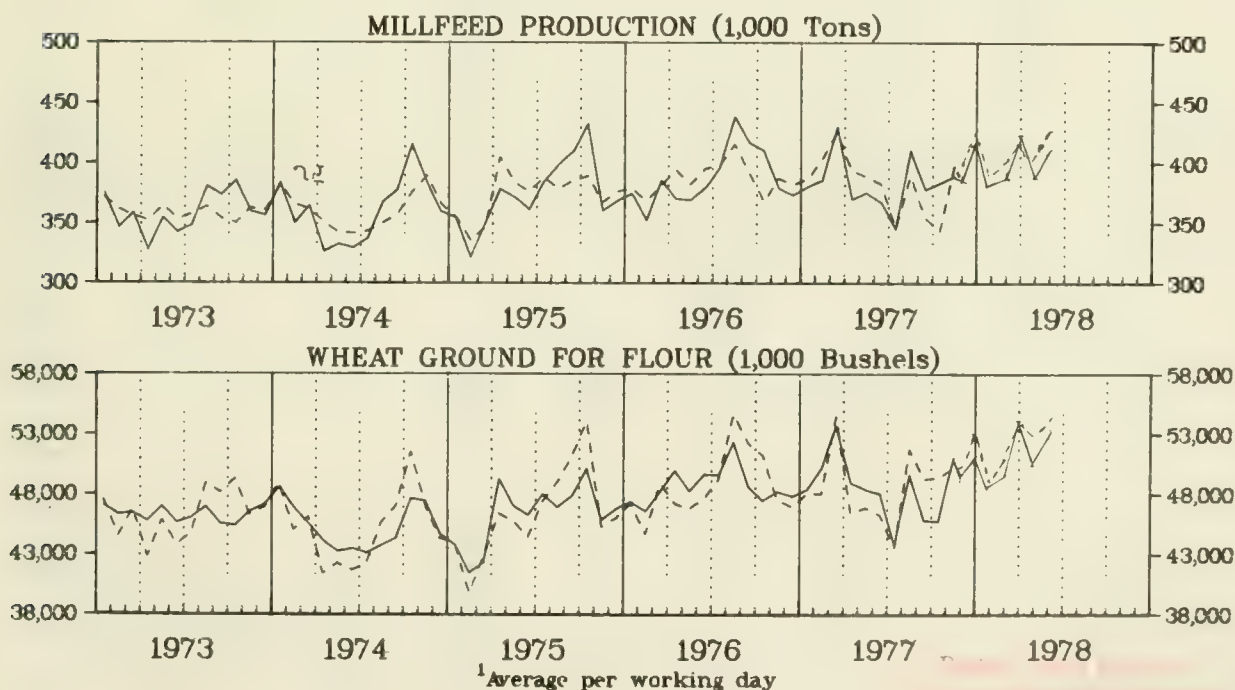
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 6. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978

----- Seasonally Adjusted
———— Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
June.....	1,097	420	53,644
May.....	1,101	433	55,373
April.....	1,173	409	53,191
March.....	1,099	426	54,064
February.....	1,071	404	51,054
January.....	1,061	388	48,870
1977			
December.....	1,187	421	53,169
November.....	1,089	398	51,034
October.....	983	343	45,796
September.....	954	355	45,821
August.....	985	389	49,628
July.....	1,004	346	43,693
June.....	976	382	48,088
May.....	1,002	389	48,419
April.....	1,024	393	48,949
March.....	1,079	426	53,682
February.....	1,057	404	50,128
January.....	1,027	387	48,374
1976			
December.....	922	382	47,848
November.....	974	387	48,209
October.....	1,014	368	47,466
September.....	946	392	48,672
August.....	988	415	52,331
July.....	1,005	398	49,569
June.....	998	395	49,630

See footnotes at end of table 1B.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ¹ (1,000 cwt.)	Daily 24-hour capacity in wheat flour ¹ (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extration rate: ² (percent)
	Average per working day ¹	Calendar month total						
1978								
June.....	1,048	23,073	402,766	51,606	3,459	r1,036	r101.2	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	r1,034	r105.8	74.8
April.....	1,127	22,554	385,227	50,478	(NA)	r1,034	r109.1	74.5
March.....	1,079	24,330	430,260	54,821	4,096	r1,034	r102.3	73.8
February.....	1,084	21,783	385,269	48,910	(NA)	r1,061	r102.6	74.2
January.....	1,038	21,787	380,717	48,430	(NA)	r1,061	r102.3	74.9
1977								
December.....	1,112	23,363	410,169	52,106	4,160	r1,061	r100.1	74.7
November.....	1,069	22,445	389,311	50,166	(NA)	r1,053	r101.5	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	r1,053	r100.3	74.5
September.....	1,002	22,039	378,118	49,258	3,537	r1,053	r105.1	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	r1,047	r104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	r1,047	r113.4	74.3
June.....	933	20,529	366,513	46,261	4,167	r1,047	r112.2	74.0
May.....	993	20,861	375,128	46,870	(NA)	r1,043	r112.1	74.2
April.....	982	20,632	369,798	46,402	(NA)	r1,063	r108.1	74.1
March.....	1,057	24,321	430,120	54,434	4,248	r1,063	r100.9	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	r999	r107.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	r999	r101.6	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	980	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	987	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7

Note: Data include estimate for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available. ¹These data, as shown for 1977 and 1978, are revised. Data for 1976 and prior years are understated by approximately 3 to 5 percent.

²The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence day, Thanksgiving Day, and December 25. ³Collected quarterly. ⁴Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	June 1978	May 1978	June 1977
0011173	DURUM WHEAT (included in table 1 data):				
2041153	Durum wheat ground.....	M bu.....	2,362	2,591	2,781
2041155	Straight semolina durum flour.....	M cwt.....	1,028	1,127	1,245
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
0011951	RYE:				
2041611	Rye ground for flour.....	M bu.....	298	293	277
2041611	Rye flour production.....	M cwt.....	137	146	131
2041618	Rye millfeed production....	Tons.....	1,712	1,544	1,389
2041611	Rye flour stocks ¹	M cwt.....	23	(NA)	21
	24 hour capacity ¹.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	June 1978		May 1978		June 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	51,606	23,073	53,601	24,078	46,261	20,529
Middle Atlantic.....	6,773	3,110	6,700	3,028	6,194	2,781
New York.....	5,501	2,549	5,132	2,330	5,213	2,353
North Central.....	27,700	12,388	29,045	13,036	25,324	11,204
Ohio.....	2,508	1,080	2,689	1,184	2,474	1,052
Indiana.....	1,093	477	1,068	466	1,291	547
Illinois.....	2,684	1,176	3,228	1,443	2,975	1,295
Michigan.....	917	399	870	373	765	337
Minnesota.....	5,996	2,732	6,136	2,795	5,715	2,602
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,559	2,042	4,523	2,034	4,189	1,862
Nebraska.....	(D)	(D)	(D)	(D)	1,276	556
Kansas.....	6,784	3,061	7,051	3,169	5,068	2,265
South Atlantic.....	3,054	1,328	3,062	1,355	2,667	1,134
East South Central.....	2,649	1,168	2,791	1,222	2,628	1,136
Tennessee.....	2,103	929	2,178	957	2,109	915
West South Central.....	3,868	1,671	3,827	1,677	3,029	1,354
Oklahoma.....	1,560	717	1,574	727	1,358	615
Texas.....	1,700	688	1,749	732	1,413	622
Mountain.....	2,861	1,292	2,986	1,367	2,564	1,153
Montana.....	655	301	763	366	552	266
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,701	2,116	5,190	2,393	3,855	1,767
Washington.....	1,306	581	1,673	755	1,096	497
Oregon.....	901	396	799	349	692	310
California and Hawaii.....	2,494	1,139	2,718	1,289	2,067	960

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	May 1978	April 1978	5 months through May 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	260	251	971
Egypt.....	9	144	238
Guatemala.....	-	-	6
Colombia.....	-	-	16
Ecuador.....	-	-	2
Brazil.....	1	-	1
Israel.....	31	13	88
India.....	24	-	55
Chile.....	8	-	64
Sri Lanka (Ceylon).....	-	-	44
Philippine Republic.....	93	-	166
Morocco.....	22	55	99
Other.....	72	39	192
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	1,885	2,462	7,921
Nicaragua.....	2	2	6
Jamaica.....	-	10	299
Brazil.....	-	-	-
Iceland.....	-	-	12
Jordan.....	-	-	-
Saudi Arabia.....	223	459	1,332
Sri Lanka (Ceylon).....	1,312	396	1,708
Egypt.....	178	1,233	3,105
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	170	362	1,459
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	118,842	101,821	483,085
U.S.S.R.....	5,854	23,075	68,034
Venezuela.....	3,076	1,140	9,358
Peru.....	1,932	2,723	5,599
Brazil.....	21,394	12,501	57,894
Portugal.....	772	1,157	12,043
Iran.....	4,852	3,691	20,895
Indonesia.....	771	220	3,188
Korean Republic.....	4,853	3,491	27,223
China (Taiwan).....	3,932	1,947	9,905
Japan.....	10,267	10,739	50,180
Egypt.....	5,089	4,777	22,100
Nigeria.....	3,259	2,735	12,191
Other.....	52,791	33,625	184,475

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: MAY 1978

(Quantity in 1,000 cwt., value in thousands of dollars)

Product	Manufacturers' production		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ³	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value		Quantity	Value
Wheat flour.....	24,078	(NA)	2,145	16,553	8.9	(NA)	-	-	-	21,933	(NA)

Note: Comparison of Standard Industrial Classification codes Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census report IM-146, Imports for Consumption.

³Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Data prior to December 1977, shown in this publication, are not comparable to the current data due to an extensive review and updating of the mailing panel. The revisions will be shown in the Summary for 1977 to be issued later this year.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are “imputed” from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12-percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the

effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, “What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?”, the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) *Valuation*—Domestic producers’ shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition valued at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters’ trade margin above costs increases the export values compared with producers’ values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and

other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values; etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of

those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products

Foreign Trade Reports

FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census publication	Daisy Williams	(301) 763-7472
To order microfilm of Census publications	Dorothy Dunham	(301) 763-5042

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Flour Milling Products



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JULY 1978

M20A(78)-7
Issued September 1978

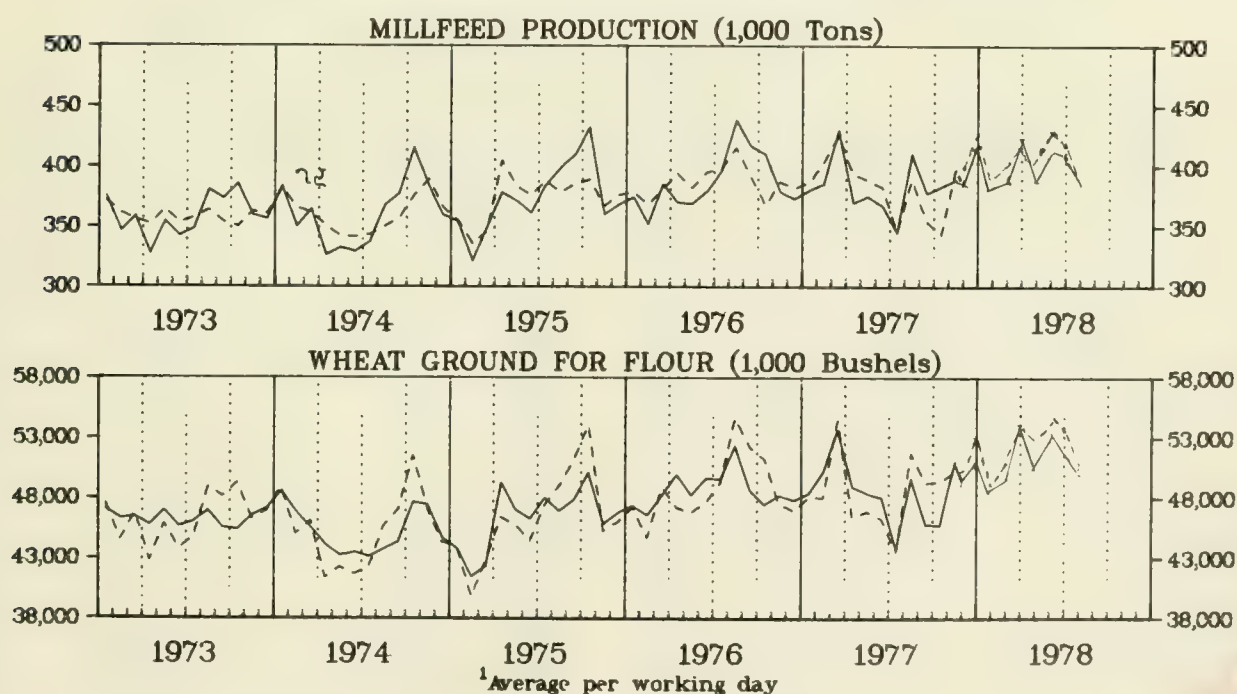
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more

complete description of this survey appears on page 5. An annual Current Industrial Report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978

----- Seasonally Adjusted
———— Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)			
Month and year	Wheat flour production average per working day ¹	Millfeed production	Wheat ground for flour
	(1,000 cwt.)	(1,000 tons)	(1,000 bushels)
1978			
July.....	1,102	388	50,105
June.....	1,096	419	53,580
May.....	1,101	423	55,373
April.....	1,173	409	53,191
March.....	1,077	426	54,064
February.....	1,076	404	51,054
January.....	1,003	388	48,870
1977			
December.....	1,085	421	53,169
November.....	1,039	398	51,034
October.....	983	343	45,796
September.....	1,003	355	45,821
August.....	985	389	49,628
July.....	1,004	346	43,693
June.....	977	382	48,088
May.....	999	389	48,419
April.....	1,022	393	48,949
March.....	1,077	426	53,682
February.....	1,058	404	50,128
January.....	1,028	387	48,374
1976			
December.....	922	382	47,848
November.....	974	387	48,209
October.....	1,014	368	47,466
September.....	946	392	48,672
August.....	988	415	52,331
July.....	1,005	398	49,569

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ¹ (1,000 cwt.)	Daily 24-hour capacity in wheat flour ¹ (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ² (percent)
	Average per working day ¹	Calendar month total						
1978								
July.....	1,065	22,376	388,090	50,005	(NA)	1,036	102.8	74.6
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	^r 1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	^r 1,089	21,738	385,269	48,910	(NA)	1,061	102.6	74.2
January.....	^r 990	21,787	380,717	48,430	(NA)	1,061	^r 93.3	74.9
1977								
December.....	^r 1,062	23,363	410,169	52,106	4,160	1,061	100.1	74.7
November.....	1,069	22,445	389,311	50,166	(NA)	1,053	101.5	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	1,053	^r 99.7	74.5
September.....	^r 1,049	22,039	378,118	49,258	3,537	1,053	^r 99.7	74.5
August.....	1,001	23,023	410,232	51,712	(NA)	1,047	^r 95.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	1,047	^r 92.6	74.3
June.....	933	20,529	366,513	46,261	4,167	1,047	^r 89.1	74.0
May.....	993	20,861	375,128	46,870	(NA)	1,063	^r 93.5	74.2
April.....	982	20,632	369,798	46,402	(NA)	1,063	^r 92.4	74.1
March.....	1,057	24,321	430,120	54,434	4,248	1,063	^r 99.5	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	999	107.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	999	101.6	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	980	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6

Note: Data include estimate for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	July 1978	June 1978	July 1977
0011173	Durum wheat (included in table 1 data):				
2041153	Durum wheat ground.....	M bu.....	2,225	2,362	2,601
2041155	Straight semolina durum flour.....	M cwt.....	961	1,028	1,147
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	Rye:				
0011951	Rye ground for flour.....	M bu.....	260	298	263
2041611	Rye flour production.....	M cwt.....	114	137	125
2041618	Rye millfeed production....	Tons.....	1,308	1,712	1,377
2041611	Rye flour stocks ¹	M cwt.....	(NA)	22	(NA)
	24 hour capacity ¹.....	..do.....	9	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	July 1978		June 1978		July 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	50,005	22,376	51,544	23,051	43,518	19,393
Middle Atlantic.....	6,770	3,114	6,771	3,110	5,628	2,525
New York.....	5,585	2,593	5,508	2,549	4,775	2,153
North Central.....	26,737	12,017	27,584	12,352	24,016	10,705
Ohio.....	2,500	1,080	2,420	1,049	2,537	1,085
Indiana.....	1,202	525	1,093	477	1,201	510
Illinois.....	2,838	1,253	2,684	1,176	2,666	1,158
Michigan.....	757	324	917	399	692	303
Minnesota.....	5,326	2,434	5,996	2,732	5,466	2,516
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,809	2,151	4,559	2,044	3,976	1,757
Nebraska.....	(D)	(D)	(D)	(D)	1,073	469
Kansas.....	6,226	2,799	6,756	3,054	4,951	2,259
South Atlantic.....	3,059	1,336	3,110	1,342	2,372	1,011
East South Central.....	2,416	1,063	2,649	1,168	2,417	1,040
Tennessee.....	1,840	815	2,103	929	1,846	802
West South Central.....	3,647	1,576	3,868	1,671	2,693	1,214
Oklahoma.....	1,423	651	1,560	717	1,285	585
Texas.....	1,628	664	1,700	688	1,274	569
Mountain.....	2,707	1,212	2,861	1,292	2,628	1,177
Montana.....	561	258	655	301	581	274
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,668	2,125	4,701	2,116	3,764	1,721
Washington.....	1,304	583	1,306	581	1,133	511
Oregon.....	963	428	901	396	662	295
California and Hawaii.....	2,401	1,114	2,494	1,139	1,969	915

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	June 1978	May 1978	6 months through June 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	123	260	1,094
Egypt.....	-	9	238
Guatemala.....	-	-	6
Colombia.....	1	-	17
Ecuador.....	-	-	2
Brazil.....	-	1	1
Israel.....	-	31	88
India.....	-	24	55
Chile.....	-	8	64
Sri Lanka (Ceylon).....	4	-	48
Philippine Republic.....	36	93	202
Morocco.....	43	22	142
Other.....	39	72	231
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	2,442	1,885	10,363
Nicaragua.....	2	2	8
Jamaica.....	53	-	352
Brazil.....	-	-	-
Iceland.....	-	-	12
Jordan.....	-	-	-
Saudi Arabia.....	541	223	1,873
Sri Lanka (Ceylon).....	314	1,312	2,022
Egypt.....	7,347	178	4,452
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	185	170	1,644
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	108,830	118,842	591,915
U.S.S.R.....	5,103	5,854	73,137
Venezuela.....	3,694	3,076	13,052
Peru.....	1,901	1,932	7,500
Brazil.....	14,270	21,394	72,164
Portugal.....	411	772	12,454
Iran.....	6,582	4,852	27,477
Indonesia.....	3,542	771	6,730
Korean Republic.....	4,000	4,853	31,223
China (Taiwan).....	236	3,932	10,141
Japan.....	9,880	10,267	60,060
Egypt.....	5,075	5,089	27,175
Nigeria.....	2,381	3,259	14,572
Other.....	51,755	52,791	236,230

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: JUNE 1978

(Quantity in 1,000 cwt., value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ³	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	23,051	(NA)	2,565	23,356	9.0	(NA)	-	-	-	20,486	(NA)

Note: Comparison of Standard Industrial Classification codes Schedule B Export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of Census report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Data prior to December 1977, shown in this publication, are not comparable to the current data due to an extensive review and updating of the mailing panel. The revisions will be shown in the Summary for 1977 to be issued later this year.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in

individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small

portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) *Valuation*—Domestic producers' shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition values at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters' trade margin above costs increases the export values compared with producers' values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values: etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments value under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACT FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census publication	Daisy Williams	(301) 763-7472
To order microfiche of Census publications	Dorothy Dunham	(301) 763-5511

a guide to sources
1976

Subject	Tabular Detail	Area to Which Data Apply	Frequency	Sources See B-1 on page 10 on 129-130
Employed People— Each of work activities by age group	Male by occupation, 1 Black in male " 197 Total employed domestic labor, 1960-1970 " 197 " 1970-1971 " 1971-1972	1970-1971	Annual	195 Current Population Reports: The Social and Economic Status of Negroes in the United States, 1970 " 1971, 1972 " 1973, 1974 " 1975, 1976 " 1977, 1978
Unemployed People Labor status in last year worked	1 permanent unemployed 1970-1971 " 1971-1972 Total Black unemployment By sex Occupation, last worked in unemployed	1970-1971 1971-1972 1972-1973 1973-1974 1974-1975 1975-1976 1976-1977 1977-1978 1978-1979 1979-1980 1980-1981 1981-1982 1982-1983 1983-1984 1984-1985 1985-1986 1986-1987 1987-1988 1988-1989 1989-1990 1990-1991 1991-1992 1992-1993 1993-1994 1994-1995 1995-1996 1996-1997 1997-1998 1998-1999 1999-2000 2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023 2023-2024 2024-2025 2025-2026 2026-2027 2027-2028 2028-2029 2029-2030 2030-2031 2031-2032 2032-2033 2033-2034 2034-2035 2035-2036 2036-2037 2037-2038 2038-2039 2039-2040 2040-2041 2041-2042 2042-2043 2043-2044 2044-2045 2045-2046 2046-2047 2047-2048 2048-2049 2049-2050 2050-2051 2051-2052 2052-2053 2053-2054 2054-2055 2055-2056 2056-2057 2057-2058 2058-2059 2059-2060 2060-2061 2061-2062 2062-2063 2063-2064 2064-2065 2065-2066 2066-2067 2067-2068 2068-2069 2069-2070 2070-2071 2071-2072 2072-2073 2073-2074 2074-2075 2075-2076 2076-2077 2077-2078 2078-2079 2079-2080 2080-2081 2081-2082 2082-2083 2083-2084 2084-2085 2085-2086 2086-2087 2087-2088 2088-2089 2089-2090 2090-2091 2091-2092 2092-2093 2093-2094 2094-2095 2095-2096 2096-2097 2097-2098 2098-2099 2099-2100 2100-2101 2101-2102 2102-2103 2103-2104 2104-2105 2105-2106 2106-2107 2107-2108 2108-2109 2109-2110 2110-2111 2111-2112 2112-2113 2113-2114 2114-2115 2115-2116 2116-2117 2117-2118 2118-2119 2119-2120 2120-2121 2121-2122 2122-2123 2123-2124 2124-2125 2125-2126 2126-2127 2127-2128 2128-2129 2129-2130 2130-2131 2131-2132 2132-2133 2133-2134 2134-2135 2135-2136 2136-2137 2137-2138 2138-2139 2139-2140 2140-2141 2141-2142 2142-2143 2143-2144 2144-2145 2145-2146 2146-2147 2147-2148 2148-2149 2149-2150 2150-2151 2151-2152 2152-2153 2153-2154 2154-2155 2155-2156 2156-2157 2157-2158 2158-2159 2159-2160 2160-2161 2161-2162 2162-2163 2163-2164 2164-2165 2165-2166 2166-2167 2167-2168 2168-2169 2169-2170 2170-2171 2171-2172 2172-2173 2173-2174 2174-2175 2175-2176 2176-2177 2177-2178 2178-2179 2179-2180 2180-2181 2181-2182 2182-2183 2183-2184 2184-2185 2185-2186 2186-2187 2187-2188 2188-2189 2189-2190 2190-2191 2191-2192 2192-2193 2193-2194 2194-2195 2195-2196 2196-2197 2197-2198 2198-2199 2199-2200 2200-2201 2201-2202 2202-2203 2203-2204 2204-2205 2205-2206 2206-2207 2207-2208 2208-2209 2209-2210 2210-2211 2211-2212 2212-2213 2213-2214 2214-2215 2215-2216 2216-2217 2217-2218 2218-2219 2219-2220 2220-2221 2221-2222 2222-2223 2223-2224 2224-2225 2225-2226 2226-2227 2227-2228 2228-2229 2229-2230 2230-2231 2231-2232 2232-2233 2233-2234 2234-2235 2235-2236 2236-2237 2237-2238 2238-2239 2239-2240 2240-2241 2241-2242 2242-2243 2243-2244 2244-2245 2245-2246 2246-2247 2247-2248 2248-2249 2249-2250 2250-2251 2251-2252 2252-2253 2253-2254 2254-2255 2255-2256 2256-2257 2257-2258 2258-2259 2259-2260 2260-2261 2261-2262 2262-2263 2263-2264 2264-2265 2265-2266 2266-2267 2267-2268 2268-2269 2269-2270 2270-2271 2271-2272 2272-2273 2273-2274 2274-2275 2275-2276 2276-2277 2277-2278 2278-2279 2279-2280 2280-2281 2281-2282 2282-2283 2283-2284 2284-2285 2285-2286 2286-2287 2287-2288 2288-2289 2289-2290 2290-2291 2291-2292 2292-2293 2293-2294 2294-2295 2295-2296 2296-2297 2297-2298 2298-2299 2299-2300 2300-2301 2301-2302 2302-2303 2303-2304 2304-2305 2305-2306 2306-2307 2307-2		

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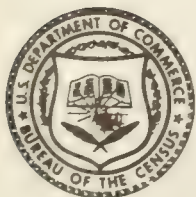
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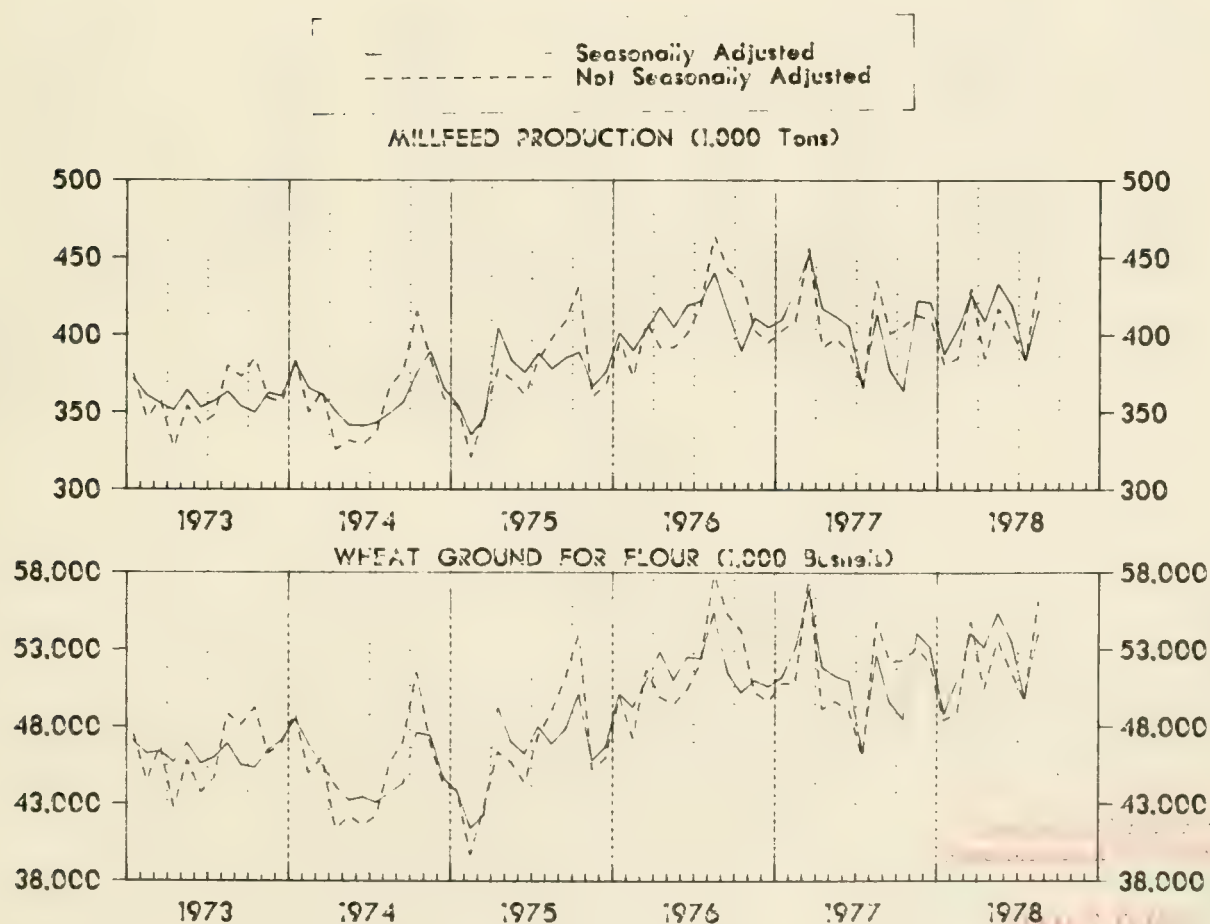
M20A(78)-8
Issued November 1978

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more

complete description of this survey appears on page 6. An annual Current Industrial Report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
August.....	1,071	416	53,899
July.....	1,100	384	49,849
June.....	1,096	419	53,580
May.....	1,146	433	55,373
April.....	1,173	409	53,191
March.....	1,077	426	54,064
February.....	1,076	404	51,054
January.....	1,003	388	48,870
1977			
December.....	1,086	421	53,169
November.....	1,101	422	54,078
October.....	1,043	364	48,519
September.....	1,060	377	48,599
August.....	1,045	413	52,633
July.....	1,064	366	46,334
June.....	1,036	405	51,010
May.....	1,063	412	51,331
April.....	1,087	417	51,882
March.....	1,144	452	56,839
February.....	1,121	429	53,069
January.....	1,089	410	51,210
1976			
December.....	977	405	50,653
November.....	1,033	411	51,039
October.....	1,075	390	50,255
September.....	1,055	415	51,532
August.....	1,154	440	55,388
July.....	1,086	422	52,460
June.....	1,058	419	52,531
May.....	1,123	405	51,071
April.....	1,065	418	52,853
March.....	1,023	404	51,031
February.....	1,038	390	49,318
January.....	1,073	401	50,126

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
August.....	1,089	25,052	437,676	56,109	(NA)	1,036	102.5	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,089	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	990	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5
January.....	1,076	22,604	403,353	50,852	(NA)	1,041	103.4	74.1
1976								
December.....	959	22,058	395,380	49,691	4,633	1,041	92.1	74.0
November.....	1,062	22,297	402,738	50,273	(NA)	1,031	103.0	73.9
October.....	1,147	24,090	434,862	54,225	(NA)	1,031	111.3	74.0
September.....	1,117	24,572	442,353	55,294	3,870	1,031	108.3	74.1
August.....	1,169	25,715	463,992	57,825	(NA)	1,049	111.4	74.1
July.....	1,048	23,063	419,395	52,145	(NA)	1,049	99.9	73.7
June.....	1,015	22,328	401,357	50,430	4,191	1,049	96.8	73.8
May.....	1,106	22,127	391,547	49,488	(NA)	1,048	105.6	74.5
April.....	1,017	22,381	392,245	49,946	(NA)	1,048	97.1	74.7
March.....	1,003	23,076	407,721	51,695	4,818	1,048	95.7	74.4
February.....	1,054	21,078	372,617	47,296	(NA)	1,042	101.1	74.3
January.....	1,062	22,292	396,105	49,976	(NA)	1,042	101.9	74.3

Note: Data include estimate for small mills.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	August 1978	July 1978	August 1977
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.....	3,352	2,225	3,347
20411 53	Straight semolina durum flour.....	M cwt.....	1,483	961	1,442
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.....	282	260	328
20416 11	Rye flour production.....	M cwt.....	123	114	151
20416 18	Rye millfeed production.....	Tons.....	1,450	1,308	1,688
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity ¹.....	..do.....	9	9	(NA)

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	August 1978		July 1978	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	56,109	25,052	49,749	22,335
Middle Atlantic.....	7,849	3,388	6,830	3,114
New York.....	6,235	2,697	5,585	2,593
North Central.....	30,389	13,551	26,700	12,019
Ohio.....	2,958	1,280	2,521	1,120
Indiana.....	1,273	546	1,222	525
Illinois.....	3,490	1,542	2,848	1,253
Michigan.....	937	403	777	324
Minnesota.....	6,195	2,816	5,326	2,434
Iowa.....	(D)	(D)	(D)	(D)
Missouri.....	5,183	2,309	4,817	2,152
Nebraska.....	(D)	(D)	(D)	(D)
Kansas.....	6,611	2,980	6,090	2,728
South Atlantic.....	3,567	1,533	3,104	1,336
East South Central.....	2,651	1,159	2,457	1,063
Tennessee.....	1,981	875	1,881	815
West South Central.....	3,601	1,614	3,494	1,567
Oklahoma.....	1,514	698	1,423	651
Texas.....	1,430	627	1,475	655
Mountain.....	3,040	1,370	2,720	1,212
Montana.....	774	361	561	258
Utah.....	(D)	(D)	(D)	(D)
Pacific.....	5,012	2,437	4,444	2,024
Washington.....	1,618	718	1,298	571
Oregon.....	861	413	863	402
California and Hawaii.....	2,527	1,306	2,283	1,051

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosing figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	July 1978	June 1978	7 months through July 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	239	123	1,333
Egypt.....	-	-	238
Guatemala.....	-	-	6
Colombia.....	-	1	17
Ecuador.....	-	-	2
Brazil.....	-	-	1
Israel.....	-	-	88
India.....	-	-	55
Chile.....	-	-	64
Sri Lanka (Ceylon).....	15	4	63
Philippine Republic.....	76	36	278
Morocco.....	148	43	290
Other.....	-	39	231
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	1,547	2,442	11,910
Nicaragua.....	-	2	8
Jamaica.....	15	53	367
Brazil.....	-	-	-
Iceland.....	-	-	12
Jordan.....	114	-	114
Saudi Arabia.....	116	541	1,989
Sri Lanka (Ceylon).....	202	314	2,224
Egypt.....	1,015	7,347	5,467
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	199	185	1,843
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	106,108	108,803	698,023
U.S.S.R.....	7,790	5,103	80,921
Venezuela.....	2,152	3,694	15,204
Peru.....	1,031	1,031	8,531
Brazil.....	9,981	14,270	82,145
Portugal.....	-	411	12,454
Iran.....	2,315	6,582	29,792
Indonesia.....	2,657	3,542	9,387
Korean Republic.....	379	4,000	31,602
China (Taiwan).....	2,841	236	12,982
Japan.....	7,329	9,880	67,389
Egypt.....	7,810	5,075	34,985
Nigeria.....	3,824	2,381	18,351
Other.....	48,109	51,755	284,339

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: JULY 1978

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	22,335	(NA)	1,786	14,784	8.0	(NA)	-	-	-	20,549	(NA)

Note: Comparison of Standard Industrial Classification codes Schedule B Export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

The data for 1977 and 1976 as shown in tables 1A and 1B of this report have been revised. Approximately six establishments were added to this survey in January 1978 based upon an extensive reconciliation with the 1976 Annual Survey of Manufactures (ASM). Data for 1976 and 1977 have been estimated for these plants based upon their 1976 ASM data and their 1978 M20A reports. Revised State data for 1976 and 1977 will be shown in a separate report to be issued in the next few weeks.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no com-

comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

(a) *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c. i. f. (cost, insurance, and freight), duty, and other charges to the import point.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

(f) *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are

incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Wilkams	(301) 763-7472
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-5511

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Flour Milling Products



U.S. Department of Commerce
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SEPTEMBER 1978

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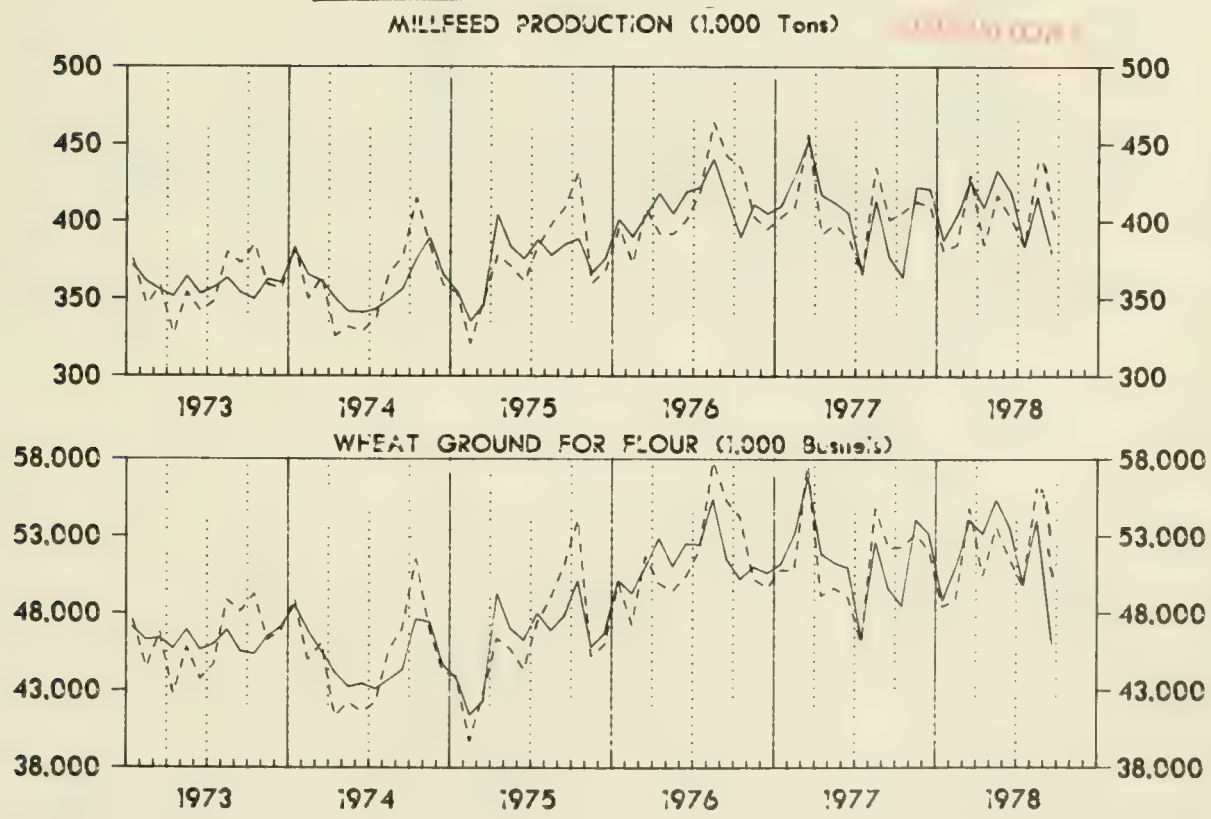
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more

complete description of this survey appears on page 6. An annual Current Industrial Report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978

Seasonally Adjusted
Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.
For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)			
Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
September.....	1,069	375	46,939
August.....	1,071	417	53,854
July.....	1,100	384	49,849
June.....	1,096	419	53,580
May.....	1,146	433	55,373
April.....	1,173	409	53,191
March.....	1,077	426	54,064
February.....	1,076	404	51,054
January.....	1,003	388	48,870
1977			
December.....	1,086	421	53,169
November.....	1,101	422	54,078
October.....	1,043	364	48,519
September.....	1,060	377	48,599
August.....	1,045	413	52,633
July.....	1,064	366	46,334
June.....	1,036	405	51,010
May.....	1,063	412	51,331
April.....	1,087	417	51,882
March.....	1,144	452	56,839
February.....	1,121	429	53,069
January.....	1,089	410	51,210
1976			
December.....	977	405	50,653
November.....	1,033	411	51,039
October.....	1,075	390	50,255
September.....	1,055	415	51,532
August.....	1,154	440	55,388
July.....	1,086	422	52,460
June.....	1,058	419	52,531
May.....	1,123	405	51,071
April.....	1,065	418	52,853
March.....	1,023	404	51,031
February.....	1,038	390	49,318
January.....	1,073	401	50,126

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Milled production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ percent
	Average per working day ¹	Calendar month total						
1978								
September.....	1,119	22,395	400,263	50,506	3,342	1,057	105.9	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,036	105.1	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,089	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	1,990	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5
January.....	1,076	22,604	403,353	50,852	(NA)	1,041	103.4	74.1
1976								
December.....	959	22,058	395,380	49,691	4,633	1,041	92.1	74.0
November.....	1,062	22,297	402,738	50,273	(NA)	1,031	103.0	73.9
October.....	1,147	24,090	434,862	54,225	(NA)	1,031	111.3	74.0
September.....	1,117	24,572	442,353	55,294	3,870	1,031	108.3	74.1
August.....	1,169	25,715	463,992	57,825	(NA)	1,049	111.4	74.1
July.....	1,048	23,063	419,395	52,145	(NA)	1,049	99.9	73.7
June.....	1,015	22,328	401,357	50,430	4,191	1,049	96.8	73.8
May.....	1,106	22,127	391,547	49,488	(NA)	1,048	105.6	74.5
April.....	1,017	22,381	392,245	49,946	(NA)	1,048	97.1	74.7
March.....	1,003	23,076	407,721	51,695	4,818	1,048	95.7	74.4
February.....	1,054	21,078	372,617	47,296	(NA)	1,042	101.1	74.3
January.....	1,062	22,292	396,105	49,976	(NA)	1,042	101.9	74.3

Note: Data include estimate for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5 to 8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	September 1978	August 1978
	Durum wheat included in table 1 data):			
00111 73	Durum wheat ground ¹	M bu.....	3,278	3,352
20411 53	Straight semolina durum flour ¹	M cwt.....	1,468	1,487
20411 55	Blended semolina durum flour.....	..do.....	D	D
	Rye:			
00119 51	Rye ground for flour.....	M bu.....	290	282
20416 11	Rye flour production.....	M cwt.....	129	123
20416 18	Rye millfeed production.....	Tons.....	1,739	1,450
20416 11	Rye flour stocks ²	M cwt.....	16	NA
	24 hour capacity ².....	..do.....	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹These data as published for June 1978 should be revised to read as follows: Durum wheat ground, 2,790; straight semolina durum flour, 1,224. ²Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	September 1978		August 1978	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	50,506	22,395	56,062	25,053
Middle Atlantic.....	7,236	2,695	7,851	3,388
New York.....	5,931	2,695	6,236	2,697
North Central.....	27,102	12,092	30,344	13,542
Ohio.....	2,759	1,183	2,914	1,271
Indiana.....	1,312	565	1,273	546
Illinois.....	3,140	1,393	3,489	1,542
Michigan.....	914	397	937	403
Minnesota.....	5,584	2,543	6,195	2,816
Iowa.....	(D)	(D)	(D)	(D)
Missouri.....	4,314	1,929	5,183	2,309
Nebraska.....	(D)	(D)	(D)	932
Kansas.....	6,079	2,735	6,611	2,980
South Atlantic.....	3,139	1,148	3,567	1,533
East South Central.....	2,439	1,062	2,651	1,159
Tennessee.....	1,828	801	1,981	875
West South Central.....	3,249	1,467	3,601	1,614
Oklahoma.....	1,416	653	1,514	698
Texas.....	1,257	558	1,430	627
Mountain.....	2,925	1,322	3,040	1,370
Montana.....	737	344	774	361
Utah.....	(D)	(D)	(D)	(D)
Pacific.....	4,416	2,038	5,008	2,447
Washington.....	1,297	573	1,618	718
Oregon.....	762	348	867	425
California and Hawaii.....	2,357	1,117	2,523	1,304

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	August 1978	July 1978	8 months through August 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.) ¹			
Total.....	100	239	1,433
Egypt.....	-	-	238
Guatemala.....	-	-	6
Colombia.....	-	-	17
Ecuador.....	-	-	2
Brazil.....	-	-	1
Israel.....	4	-	88
India.....	-	-	59
Chile.....	-	-	64
Sri Lanka (Ceylon).....	-	15	63
Philippine Republic.....	37	76	315
Morocco.....	59	148	349
Other.....	-	-	231
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt)			
Total.....	1,860	1,547	13,770
Nicaragua.....	-	-	8
Jamaica.....	14	15	381
Brazil.....	-	-	-
Iceland.....	-	-	12
Jordan.....	-	114	114
Saudi Arabia.....	309	116	2,298
Sri Lanka (Ceylon).....	353	202	2,577
Egypt.....	952	1,015	6,419
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	232	199	2,075
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	131,866	108,803	829,889
U.S.S.R.....	1,615	5,103	82,538
Venezuela.....	2,596	3,694	17,800
Peru.....	3,971	1,901	12,507
Brazil.....	4,885	14,270	87,030
Portugal.....	-	411	17,545
Iran.....	5,091	6,582	33,280
Indonesia.....	3,528	3,542	14,630
Korean Republic.....	5,243	4,000	36,845
China (Taiwan).....	999	236	13,981
Japan.....	10,458	9,880	77,847
Egypt.....	1,814	5,075	36,799
Nigeria.....	2,443	2,381	20,794
Other.....	74,682	51,755	309,021

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.
- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: AUGUST 1978

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	25,052	(NA)	1,960	121,007	7.0	(NA)	-	-	-	23,092	(NA)

Note: Comparison of Standard Industrial Classification codes Schedule B Export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

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Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all position, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no com-

comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

(a) *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

(f) *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

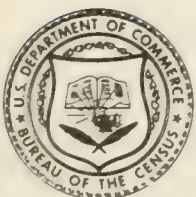
Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-5511

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CURRENT INDUSTRIAL REPORTS

Flour Milling Products

OCTOBER 1978

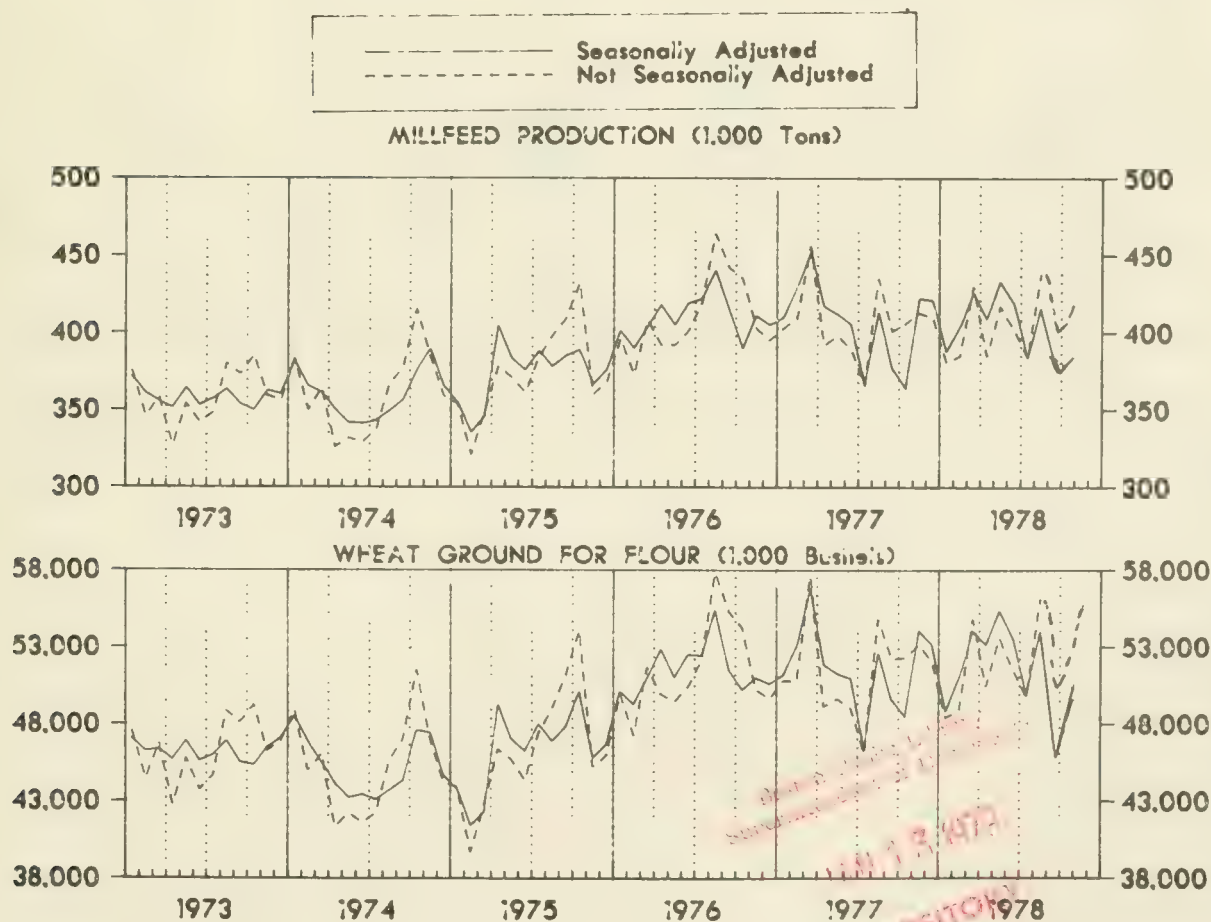
M20A(78)-10
Issued December 1978

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more

complete description of this survey appears on page 6. An annual Current Industrial Report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
October.....	1,074	389	51,232
September.....	1,022	376	46,962
August.....	1,071	416	53,899
July.....	1,100	384	49,849
June.....	1,096	419	53,580
May.....	1,146	433	55,373
April.....	1,173	409	53,191
March.....	1,077	426	54,064
February.....	1,076	404	51,054
January.....	1,003	388	48,870
1977			
December.....	1,086	421	53,169
November.....	1,101	422	54,078
October.....	1,043	364	48,519
September.....	1,060	377	48,599
August.....	1,045	413	52,633
July.....	1,064	366	46,334
June.....	1,036	405	51,010
May.....	1,063	412	51,331
April.....	1,087	417	51,882
March.....	1,144	452	56,839
February.....	1,121	429	53,069
January.....	1,089	410	51,210
1976			
December.....	977	405	50,653
November.....	1,033	411	51,039
October.....	1,075	390	50,255
September.....	1,055	415	51,532
August.....	1,154	440	55,388
July.....	1,086	422	52,460
June.....	1,058	419	52,531
May.....	1,123	405	51,071
April.....	1,065	418	52,853
March.....	1,023	404	51,031
February.....	1,038	390	49,318

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ³ (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
October.....	1,129	24,837	435,013	55,279	(NA)	1,057	106.8	74.8
September.....	1,123	22,456	400,437	50,531	3,342	1,057	106.2	74.0
August.....	1,089	25,052	437,676	56,109	(NA)	1,036	102.5	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,089	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	990	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,018	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5
January.....	1,076	22,604	403,353	50,852	(NA)	1,041	103.4	74.1
1976								
December.....	959	22,058	395,380	49,691	4,633	1,041	92.1	74.0
November.....	1,062	22,297	402,738	50,273	(NA)	1,031	103.0	73.9
October.....	1,147	24,090	434,862	54,225	(NA)	1,031	111.3	74.0
September.....	1,117	24,572	442,353	55,294	3,870	1,031	108.3	74.1
August.....	1,169	25,715	463,992	57,825	(NA)	1,049	111.4	74.1
July.....	1,048	23,063	419,395	52,145	(NA)	1,049	99.9	73.7
June.....	1,015	22,328	401,357	50,430	4,191	1,049	96.8	73.8
May.....	1,106	22,127	391,547	49,488	(NA)	1,048	105.6	74.5
April.....	1,017	22,381	392,245	49,946	(NA)	1,048	97.1	74.7
March.....	1,003	23,076	407,721	51,695	4,818	1,048	95.7	74.4
February.....	1,054	21,078	372,617	47,296	(NA)	1,042	101.1	74.3

Note: Data include estimate for small mills.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

TABLE 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION
MILL STOCKS, AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	OCTOBER 1978	SEPTEMBER 1978	OCTOBER 1977
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	3,944	3,278	3,314
2041153	STRAIGHT SEMOLINA DURUM FLOUR.	M CWT	1,696	1,468	1,431
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	340	290	313
2041611	RYE FLOUR PRODUCTION.	M CWT	149	129	136
2041618	RYE MILLFEED PRODUCTION.	TONS	1,909	1,739	1,754
2041611	RYE FLOUR STOCKS (1).	M CWT	(NA)	16	(NA)
	24 HOUR CAPACITY (1).	DO	(NA)	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

TABLE 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHELS; WHEAT PRODUCTION IN THOUSANDS OF HUNDREDWEIGHT)

GEOGRAPHIC AREA	OCTOBER 1978		SEPTEMBER 1978		OCTOBER 1977	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL.	55,279	24,837	50,531	22,456	52,352	23,396
MIDDLE ATLANTIC.	7,574	3,461	7,247	3,271	7,017	3,144
NEW YORK.	6,141	2,827	5,942	2,700	5,475	2,461
NORTH CENTRAL.	30,289	13,515	27,102	12,081	29,153	12,980
OHIO.	3,468	1,490	2,759	1,183	3,155	1,381
INDIANA.	1,434	608	1,312	565	1,387	599
ILLINOIS.	3,500	1,538	3,140	1,393	3,254	1,435
MICHIGAN.	967	428	914	390	895	398
MINNESOTA.	6,128	2,798	5,584	2,543	6,147	2,820
IOWA.	(D)	(D)	686	(D)	(D)	(D)
MISSOURI.	5,122	2,302	4,314	1,929	4,431	1,978
NEBRASKA.	(D)	(D)	1,584	(D)	(D)	(D)
KANSAS.	6,454	2,919	6,079	2,731	6,554	2,949
SOUTH ATLANTIC.	3,346	1,431	3,130	1,141	2,966	1,331
EAST SOUTH CENTRAL.	2,558	1,121	2,439	1,062	2,623	1,137
TENNESSEE.	1,968	868	1,828	801	2,068	898
WEST SOUTH CENTRAL.	3,206	1,436	3,269	1,474	3,252	1,455
OKLAHOMA.	1,244	573	1,416	653	1,198	550
TEXAS.	1,393	611	1,277	565	1,464	647
MOUNTAIN.	3,171	1,441	2,925	1,322	2,805	1,267
MONTANA.	770	358	737	344	673	319
UTAH.	(D)	678	(D)	594	(D)	(D)
PACIFIC.	5,087	2,432	4,419	2,105	4,536	2,082
WASHINGTON.	1,610	708	1,297	573	1,261	570
OREGON.	841	377	762	348	707	319
CALIFORNIA AND HAWAII.	2,684	1,354	2,360	1,184	2,568	1,193

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	September 1978	August 1978	9 months through September 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	277	100	1,710
Egypt.....	40	-	278
Guatemala.....	11	-	17
Colombia.....	3	-	20
Ecuador.....	2	-	4
Brazil.....	4	-	5
Israel.....	-	4	88
India.....	24	-	83
Chile.....	33	-	97
Sri Lanka (Ceylon).....	10	-	73
Philippine Republic.....	5	37	420
Morocco.....	15	59	364
Other.....	130	-	130
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	1,857	1,860	15,627
Nicaragua.....	-	-	8
Jamaica.....	4	14	385
Brazil.....	2	-	2
Iceland.....	-	-	-
Jordan.....	-	-	12
Saudi Arabia.....	77	309	191
Sri Lanka (Ceylon).....	60	353	2,358
Egypt.....	841	952	3,418
Philippine Republic.....	-	-	6,419
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	873	232	2,948
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	118,272	131,866	948,161
U.S.S.R.....	781	1,615	83,319
Venezuela.....	2,306	2,596	20,106
Peru.....	1,905	3,971	14,407
Brazil.....	922	4,885	87,952
Portugal.....	1,347	-	18,892
Iran.....	1,884	5,091	35,134
Indonesia.....	2,646	3,528	18,158
Korean Republic.....	7,365	5,243	44,210
China (Taiwan).....	2,686	999	16,667
Japan.....	13,515	10,458	91,362
Egypt.....	1,402	1,814	38,201
Nigeria.....	1,750	2,443	22,544
Other.....	79,764	74,682	388,785

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.
- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: SEPTEMBER 1978

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	22,456	(NA)	2,134	17,932	10.5	(NA)	-	-		20,322	(NA)

Note: Comparison of Standard Industrial Classification codes Schedule B Export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

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Flour Milling Products



M 20 A (78) - 11

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Issued January 1979

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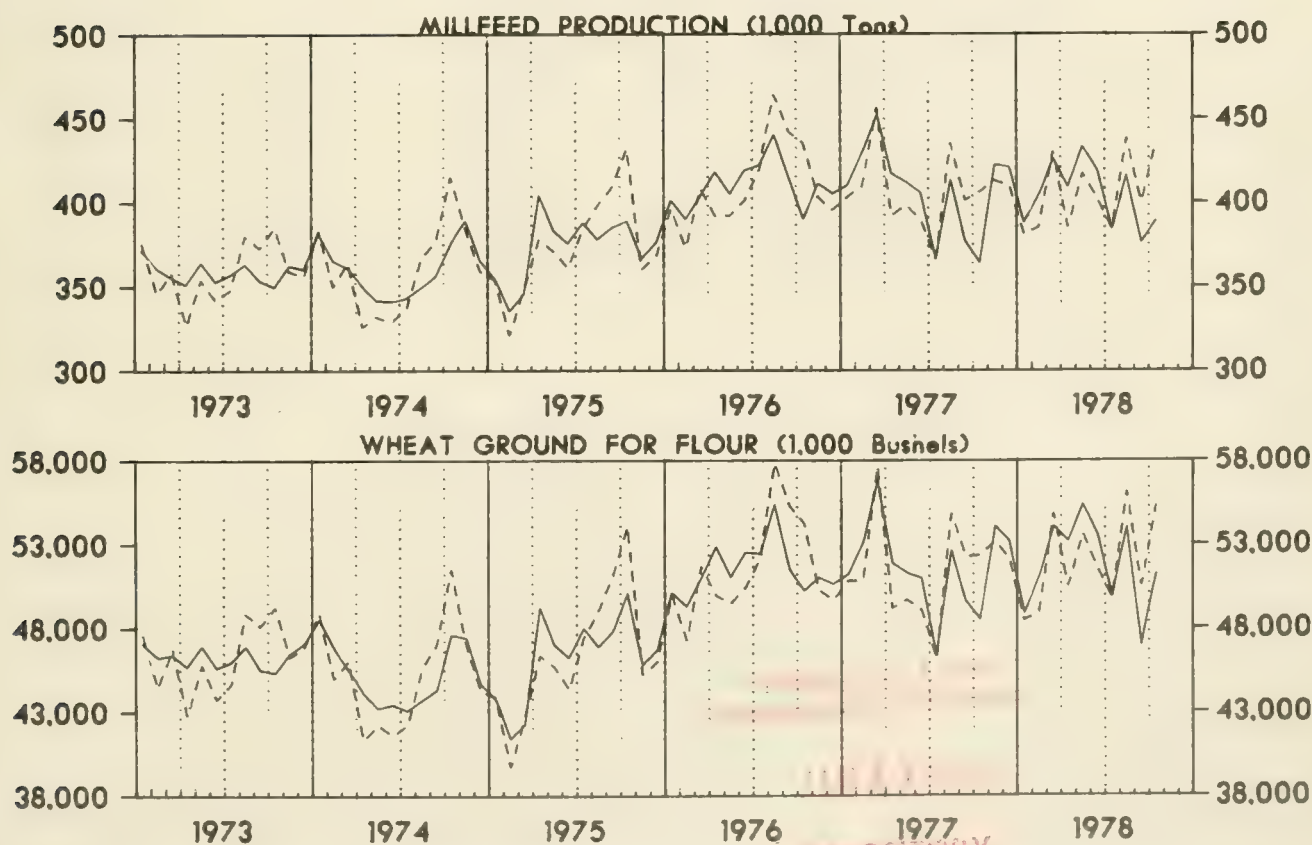
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more

complete description of this survey appears on page 6. An annual Current Industrial Report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING:
1973 TO 1978

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour 1,000 bushels
1978			
November.....	1,101	426	53,847
October.....	1,057	391	51,296
September.....	1,069	375	46,939
August.....	1,071	417	53,854
July.....	1,100	384	49,849
June.....	1,096	419	53,580
May.....	1,146	433	55,373
April.....	1,173	409	53,191
March.....	1,077	426	54,064
February.....	1,076	404	51,054
January.....	1,003	388	48,870
1977			
December.....	1,086	421	53,169
November.....	1,101	422	54,078
October.....	1,043	364	48,519
September.....	1,060	377	48,599
August.....	1,045	413	52,633
July.....	1,064	366	46,334
June.....	1,036	405	51,010
May.....	1,063	412	51,331
April.....	1,087	417	51,882
March.....	1,144	452	56,839
February.....	1,121	429	53,069
January.....	1,089	410	51,210
1976			
December.....	977	405	50,653
November.....	1,033	411	51,039
October.....	1,075	390	50,255
September.....	1,055	415	51,532
August.....	1,154	440	55,388
July.....	1,086	422	52,460
June.....	1,058	419	52,531
May.....	1,123	405	51,071
April.....	1,065	418	52,853
March.....	1,023	404	51,031
February.....	1,038	390	49,318

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 To 1978

(Not seasonally adjusted)

Month and year	Wheat flour production 1,000 cwt.		Millfeed production tons	Wheat ground for flour 1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
November.....	1,133	23,803	416,247	52,932	(NA)	1,057	107.2	74.9
October.....	1,129	24,843	436,433	55,348	(NA)	1,057	106.8	74.6
September.....	1,119	22,395	400,263	50,506	3,342	1,057	105.9	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,036	105.1	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	74.8
February.....	1,089	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	1,990	21,787	380,717	48,430	NA	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5
January.....	1,076	22,604	403,353	50,852	(NA)	1,041	103.4	74.1
1976								
December.....	959	22,058	395,380	49,691	4,633	1,041	92.1	74.0
November.....	1,062	22,297	402,738	50,273	(NA)	1,031	103.0	73.9

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	November 1978	October 1978	November 1977
00111 73	Durum wheat included in table 1 data :				
20411 53	Durum wheat ground ¹	M bu.....	3,619	4,012	3,174
20411 55	Straight semolina durum flour.....	M cwt.....	1,608	1,726	1,842
	Blended semolina durum flour.....	do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	366	340	332
20416 11	Rye flour production.....	M cwt.....	159	147	149
20416 18	Rye millfeed production.....	Tons.....	2,183	1,909	1,894
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity ¹	do.....	(D)	10,135	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	November 1978		October 1978		November 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	52,932	23,803	55,348	24,843	53,159	23,785
Middle Atlantic.....	7,472	3,367	7,574	3,461	7,207	3,426
New York.....	5,939	2,678	6,141	2,827	5,583	2,449
North Central.....	27,966	12,629	30,221	11,520	28,770	12,329
Ohio.....	2,878	1,269	3,401	1,495	2,985	1,303
Indiana.....	1,331	572	1,434	608	1,225	587
Illinois.....	3,050	1,347	3,500	1,538	3,215	1,424
Michigan.....	867	383	966	428	563	387
Minnesota.....	6,180	2,813	6,128	2,798	5,930	2,703
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,599	2,073	5,122	2,302	4,989	2,233
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,797	2,940	6,454	2,919	6,448	3,305
South Atlantic.....	3,525	1,542	3,306	1,431	3,318	1,654
East South Central.....	2,408	1,054	2,558	1,121	2,666	1,155
Tennessee.....	1,852	817	1,968	868	2,147	931
West South Central.....	3,404	1,521	3,199	1,436	3,405	1,653
Oklahoma.....	1,241	569	1,244	573	1,367	630
Texas.....	1,609	708	1,386	611	1,495	624
Mountain.....	3,051	1,390	3,171	1,441	3,044	1,381
Montana.....	826	382	770	358	772	367
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,106	2,300	5,319	2,433	4,749	2,187
Washington.....	1,475	652	1,572	649	1,321	547
Oregon.....	763	350	818	382	722	324
California and Hawaii.....	2,868	1,298	2,929	1,452	2,706	1,285

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	October 1978	September 1978	10 months through October 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	342	277	2,052
Egypt.....	18	40	296
Guatemala.....	-	11	17
Colombia.....	5	3	25
Ecuador.....	-	2	4
Brazil.....	-	4	5
Israel.....	2	-	90
India.....	37	24	120
Chile.....	23	33	120
Sri Lanka (Ceylon).....	-	10	73
Philippine Republic.....	20	5	440
Morocco.....	65	15	429
Other.....	172	130	302
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt)			
Total.....	1,448	1,857	17,075
Nicaragua.....	33	-	41
Jamaica.....	71	4	456
Brazil.....	-	2	2
Iceland.....	-	-	-
Jordan.....	-	-	12
Saudi Arabia.....	278	77	469
Sri Lanka (Ceylon).....	705	60	3,063
Egypt.....	307	841	3,725
Philippine Republic.....	-	-	6,419
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	54	873	3,002
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	112,961	118,273	1,054,651
U.S.S.R.....	4,650	784	102,517
Venezuela.....	2,242	2,306	22,348
Peru.....	845	1,905	15,252
Brazil.....	1,852	922	89,804
Portugal.....	3,715	1,347	17,516
Iran.....	3,785	1,884	40,552
Indonesia.....	1,823	2,646	17,384
Korean Republic.....	5,128	7,365	52,756
China (Taiwan).....	3,290	2,685	19,956
Japan.....	9,765	13,515	101,127
Egypt.....	2,094	1,402	40,295
Nigeria.....	2,656	1,750	25,245
Other.....	71,116	79,762	509,899

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: OCTOBER 1978

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	24,843	(NA)	1,960	15,878	6.4	(NA)	-	-	-	22,883	(NA)

Note: Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

The data for 1977 and 1976 as shown in tables 1A and 1B of this report have been revised. Approximately six establishments were added to this survey in January 1978 based upon an extensive reconciliation with the 1976 Annual Survey of Manufactures (ASM). Data for 1976 and 1977 have been estimated for these plants based upon their 1976 ASM data and their 1978 M20A reports. Revised State data for 1976 and 1977 will be shown in a separate report to be issued in the next few weeks.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all position, sold and unsold.

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Flour Milling Products



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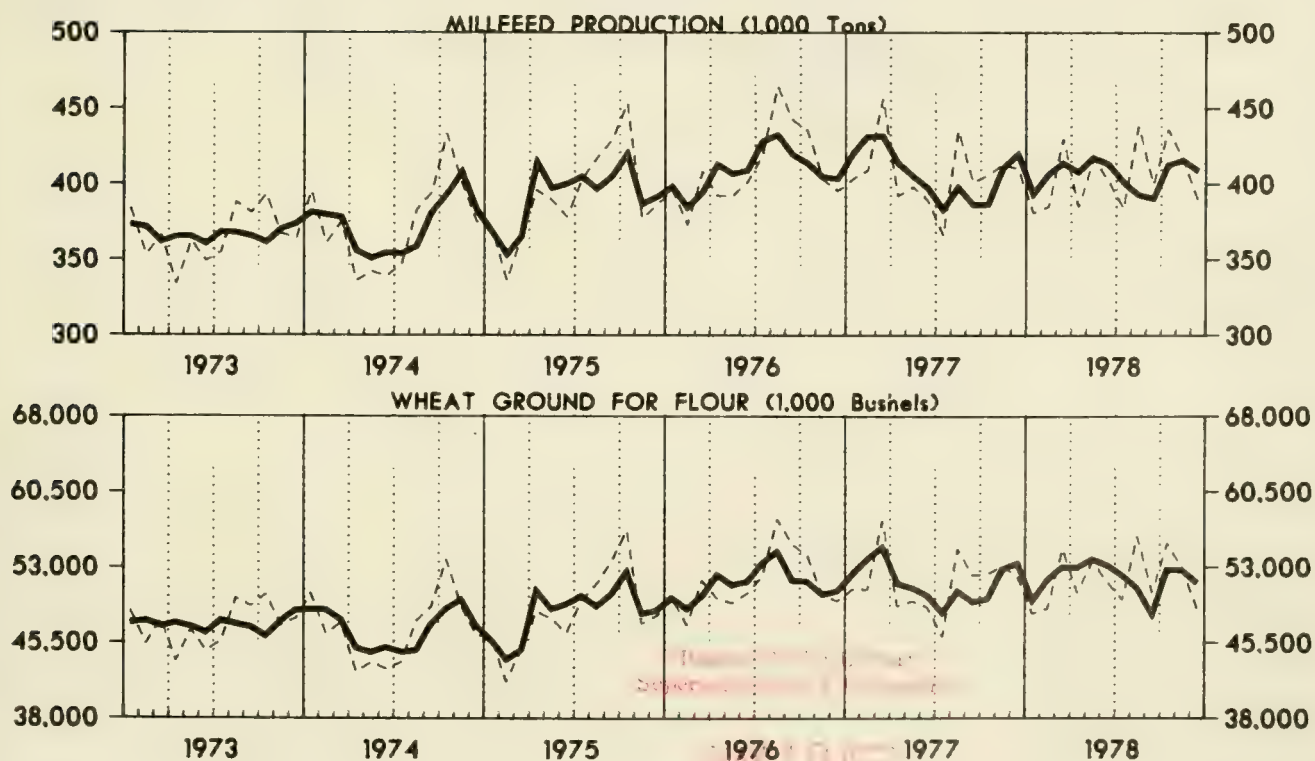
M20A(78)-12
Issued February 1979

This report includes revised monthly data for 1973 to 1975 as shown in table 2. These revisions are based upon a reconciliation between the M-20A monthly flour milling report and the 1976 Annual Survey of Manufactures (ASM). Approximately six establishments were added to this survey in January 1978 based on this reconciliation. Data for these plants for 1973 to 1975 have been estimated based upon the information submitted by these plants to the Bureau on their ASM reports. Revised monthly data for 1976 and 1977 were published in November 1978.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978

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- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1977 AND 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
December.....	1,078	400	51,435
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,040	390	48,335
August.....	1,087	393	50,886
July.....	1,069	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788
January.....	1,016	393	49,714
1977			
December.....	1,072	419	53,399
November.....	1,089	410	52,846
October.....	1,028	386	49,905
September.....	1,075	386	49,609
August.....	1,060	397	50,659
July.....	1,044	383	48,499
June.....	1,044	397	50,196
May.....	1,061	405	50,954
April.....	1,058	413	51,443
March.....	1,180	431	54,965
February.....	1,145	431	53,775
January.....	1,060	419	52,359

Note: The data as shown above have been revised based upon new seasonal factors published in February 1979 in series M20A Supplement, Flour Milling Products, Seasonal Adjustment Supplement, 1971-1978.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1977 AND 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
December.....	1,089	21,791	381,332	48,893	3,214	1,049	103.9	74.3
November.....	1,130	23,738	416,152	52,934	(NA)	1,057	106.9	74.7
October.....	1,129	24,843	436,433	55,348	(NA)	1,057	106.8	74.6
September.....	1,119	22,395	400,263	50,506	3,342	1,057	105.9	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,036	105.1	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,089	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	990	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5
January.....	1,076	22,604	403,353	50,852	(NA)	1,041	103.4	74.1

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. WHEAT FLOUR MILLING 1973 TO 1975 REVISED

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks (1,000 cwt.)	Daily 24-hour capacity in wheat flour (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ² (percent)	Average pounds per cwt. sack of flour	
	Average per working day ¹	Calendar month total							Wheat	Millfeed
1975										
December.....	978	21,519	385,691	48,212	4,201	1,042	93.9	74.4	134.4	35.8
November.....	1,171	21,082	377,344	47,421	(NA)	1,043	112.3	74.1	135.0	35.8
October.....	1,100	25,297	452,912	56,685	(NA)	1,043	105.5	74.4	134.4	35.8
September.....	1,132	23,774	428,709	53,627	4,451	1,043	108.5	73.9	135.3	36.1
August.....	1,083	22,751	417,181	51,379	(NA)	1,036	104.6	73.8	135.5	36.7
July.....	1,008	22,176	402,515	49,718	(NA)	1,036	97.3	74.3	134.5	36.3
June.....	980	20,577	378,397	46,513	4,766	1,036	94.6	73.7	135.6	36.8
May.....	1,016	21,341	388,856	47,919	(NA)	1,007	100.9	74.2	134.7	36.4
April.....	981	21,590	396,185	48,602	(NA)	1,007	97.5	74.0	135.1	36.7
March.....	951	19,972	365,815	44,896	5,112	1,007	94.4	74.1	134.9	36.6
February.....	925	18,502	336,437	41,658	(NA)	1,010	91.6	74.0	135.1	36.4
January.....	927	20,404	371,059	46,045	(NA)	1,010	91.8	73.9	135.4	36.4
1974										
December.....	979	20,550	375,291	46,280	4,800	1,010	96.9	74.0	135.1	36.5
November.....	1,090	21,795	401,347	49,135	(NA)	1,038	105.0	73.9	135.3	36.8
October.....	1,036	23,818	433,206	53,771	(NA)	1,038	99.8	73.8	135.5	36.4
September.....	1,088	21,752	393,556	49,104	4,145	1,038	104.8	73.8	135.4	36.2
August.....	962	21,165	383,223	47,665	(NA)	1,036	92.9	74.0	135.1	36.2
July.....	878	19,320	347,522	43,565	(NA)	1,036	84.8	73.9	135.3	36.0
June.....	960	19,190	339,254	42,932	3,933	1,036	92.6	74.5	134.2	35.4
May.....	887	19,516	342,368	43,535	(NA)	1,024	86.6	74.7	133.8	35.1
April.....	867	19,063	336,176	42,657	(NA)	1,024	84.6	74.5	134.3	35.3
March.....	973	21,407	375,344	47,498	5,558	1,024	95.0	75.1	133.1	35.1
February.....	1,093	20,768	360,896	46,416	(NA)	990	110.4	74.6	134.1	34.8
January.....	1,034	22,753	394,924	50,404	(NA)	990	104.5	75.2	132.9	34.7
1973										
December.....	1,071	21,424	363,578	47,926	5,736	990	108.2	74.5	134.2	33.9
November.....	1,005	21,104	366,807	47,274	(NA)	1,039	96.7	74.4	134.4	34.8
October.....	1,069	22,459	392,989	50,325	(NA)	1,039	102.9	74.4	134.4	35.0
September.....	1,103	22,057	380,802	49,154	4,349	1,039	106.1	74.8	133.7	34.5
August.....	972	22,367	387,739	49,944	(NA)	1,061	91.7	74.6	134.0	34.7
July.....	976	20,502	355,315	45,647	(NA)	1,061	92.0	74.9	133.6	34.7
June.....	962	20,199	349,205	44,713	5,618	1,061	90.7	75.3	132.8	34.6
May.....	957	21,049	361,705	46,800	(NA)	1,054	90.8	75.0	133.4	34.4
April.....	939	19,728	333,816	43,717	(NA)	1,054	89.1	75.2	133.0	33.8
March.....	978	21,507	366,040	47,790	5,813	1,054	92.8	75.0	133.3	34.0
February.....	1,023	20,457	353,326	45,438	(NA)	1,016	100.7	75.0	133.3	34.5
January.....	991	21,808	383,218	48,559	(NA)	1,016	97.6	74.9	133.6	35.1

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays, unless such holidays fall on Saturday: January 1, May 30, July 4, Labor Day, Thanksgiving Day, and December 25.²Wheat flour production as compared with amount of wheat ground.

Table 3 QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	December 1978	November 1978	December 1977
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground ¹	M bu.....	3,262	3,619	3,214
20411 55	Straight semolina durum flour.....	M cwt.....	1,452	1,608	1,427
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	349	366	334
20416 11	Rye flour production.....	M cwt.....	151	159	153
20416 18	Rye millfeed production.....	Tons.....	1,975	2,183	1,788
20416 11	Rye flour stocks ¹	M cwt.....	23	(NA)	24
	24 hour capacity ¹.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 4. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	December 1978		November 1978		December 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	48,893	21,791	52,934	23,738	52,106	23,363
Middle Atlantic.....	7,204	3,236	7,472	3,367	7,143	3,158
New York.....	5,862	2,645	5,932	2,678	5,677	2,507
North Central.....	25,201	11,291	27,966	12,560	27,338	12,305
Ohio.....	2,656	1,165	2,878	1,269	3,195	1,398
Indiana.....	1,314	561	1,331	572	1,272	549
Illinois.....	2,625	1,175	3,050	1,347	2,594	1,148
Michigan.....	724	320	867	383	803	349
Minnesota.....	5,718	2,592	6,180	2,813	5,447	2,491
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,900	1,767	4,599	2,073	4,298	1,947
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,436	2,475	5,797	2,640	6,736	3,086
South Atlantic.....	3,209	1,411	3,525	1,542	4,182	1,831
East South Central.....	2,415	1,053	2,408	1,054	2,744	1,195
Tennessee.....	1,846	813	1,852	817	2,196	961
West South Central.....	3,368	1,434	3,404	1,521	3,431	1,548
Oklahoma.....	1,258	579	1,241	569	1,301	598
Texas.....	1,378	597	1,609	708	1,355	606
Mountain.....	2,797	1,243	3,051	1,390	2,981	1,353
Montana.....	721	326	826	382	704	331
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,699	2,123	5,108	2,304	4,287	1,973
Washington.....	1,303	591	1,475	661	1,123	510
Oregon.....	776	351	771	351	657	302
California and Hawaii.....	2,620	1,181	2,862	1,292	2,507	1,161

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 5. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	November 1978	October 1978	11 months through November 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	246	342	2,298
Egypt.....	-	18	296
Guatemala.....	7	-	24
Colombia.....	-	5	25
Ecuador.....	-	-	4
Brazil.....	-	-	5
Israel.....	19	2	109
India.....	-	37	120
Chile.....	43	23	163
Sri Lanka (Ceylon).....	22	-	95
Philippine Republic.....	101	20	541
Morocco.....	46	65	475
Other.....	8	172	310
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt)			
Total.....	306	1,448	17,381
Nicaragua.....	-	33	41
Jamaica.....	34	71	490
Brazil.....	-	-	2
Iceland.....	39	-	39
Jordan.....	-	-	-
Saudi Arabia.....	116	278	585
Sri Lanka (Ceylon).....	13	705	3,076
Egypt.....	-	307	3,725
Philippine Republic.....	-	-	6,419
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	104	-	3,106
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	92,314	112,961	1,146,965
U.S.S.R.....	940	4,650	103,457
Venezuela.....	2,627	2,242	24,925
Peru.....	22	845	15,274
Brazil.....	9,803	1,852	99,607
Portugal.....	1,328	3,715	18,844
Iran.....	2,846	3,785	43,398
Indonesia.....	1,422	1,823	18,806
Korean Republic.....	3,899	5,128	56,655
China (Taiwan).....	-	3,290	19,950
Japan.....	9,393	9,765	110,520
Egypt.....	-	2,094	40,295
Nigeria.....	3,616	2,656	28,861
Other.....	56,368	71,116	566,267

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.
- Represents zero.

Table 6. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: NOVEMBER 1978

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	23,738	(NA)	552	4,405	4.3	(NA)	-	-	-	23,186	NA

Note: Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all position, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no com-

parable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

(a) *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

(f) *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-5511

3. 158:

Flour Milling Products



1720 A (78) 13

U.S. Department of Commerce
BUREAU OF THE CENSUS

SUMMARY FOR 1978

M20A(78)-13
Issued September 1979

SUMMARY OF FINDINGS

Total commercial production of wheat flour in 1978 amounted to 278 million cwt. sacks, about 2.2 million cwt. sacks above the 1977 production. Production figures in 1978 and 1977 were at 105.4 and 100.9 percent, respectively, of total annual capacity.

Wheat mills in 1978 and 1977 ground 621.3 and 618.1 million bushels of wheat; corresponding millfeed production figures for these years were 4,860 and 4,787 thousand tons.

Production of rye flour in 1978 amounted to 1,640 thousand cwt. sacks, compared with 1,660 thousand cwt. in 1977. Rye grinding in 1978 and 1977 were 3,673 and 3,637 thousand bushels, respectively.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

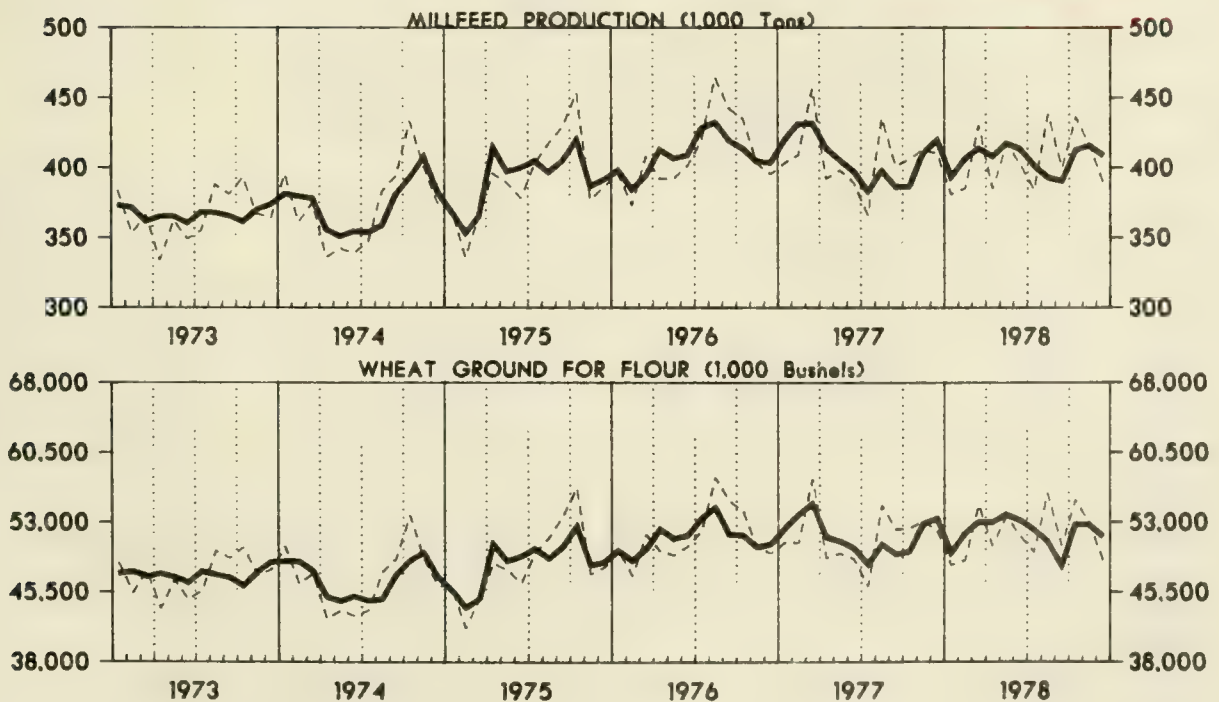
WHEAT FLOUR MILLING: 1973 TO 1978

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Table 1. SUMMARY: COMMERCIAL WHEAT MILLING PRODUCTION: 1953 TO 1978

Year	Wheat flour production (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Average pounds per cwt. sacks of flour		Flour extraction rate ¹ (percent)
				Wheat	Millfeed	
1953.....	222,177	515,446	4,432	139.2	39.9	71.8
1954.....	221,405	514,028	4,440	139.3	40.1	71.8
1955.....	225,648	522,851	4,482	139.0	39.7	71.9
1956.....	229,758	527,159	4,416	137.7	38.4	72.6
1957.....	238,888	548,532	4,584	137.8	38.4	72.6
1958.....	248,004	566,688	4,713	137.1	38.0	72.9
1959.....	250,568	570,856	4,707	136.7	37.6	73.2
1960.....	255,141	582,719	4,827	137.0	37.8	73.0
1961.....	260,316	591,999	4,858	136.4	37.3	73.3
1962.....	262,069	595,353	4,876	136.3	37.2	73.4
1963.....	260,007	589,245	4,794	136.0	36.9	73.5
1964.....	261,663	591,654	4,890	135.7	37.4	73.7
1965.....	250,384	564,724	4,645	135.3	37.1	73.9
1966.....	253,000	568,672	4,619	134.8	36.5	74.1
1967.....	245,240	549,801	4,423	134.5	36.1	74.3
1968.....	254,185	569,649	4,511	134.5	35.5	74.4
1969.....	254,094	567,956	4,458	134.1	35.1	74.6
1970.....	253,094	563,714	4,409	133.6	34.8	74.8
1971.....	249,810	555,092	4,279	133.3	34.3	75.0
1972.....	250,441	557,801	4,303	133.6	34.4	74.8
1973.....	254,661	567,287	4,395	133.7	34.5	74.8
1974.....	251,097	562,962	4,483	134.5	35.7	74.3
1975.....	258,985	582,675	4,701	134.9	36.3	74.1
1976.....	275,077	618,284	4,920	135.0	35.8	74.2
1977.....	275,784	618,125	4,787	134.5	34.7	74.4
1978.....	277,950	621,321	4,860	134.1	35.0	74.6

¹Wheat flour production as compared with the amount of wheat ground.²Based on 1954 Census of Manufactures. See Census report MC-20D, Grain Mill Products.

Table 2. COMMERCIAL WHEAT MILLING PRODUCTION, SEASONALLY ADJUSTED AND UNADJUSTED, BY MONTHS: 1978 AND 1977

Month	Seasonally adjusted			Unadjusted						
	Wheat flour production average per working day ¹ (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Mill feed production (1,000 tons)	Wheat flour production (1,000 cwt. sacks)		Wheat ground for flour (1,000 bushels)	Mill feed production (1,000 tons)	Average pounds per cwt. sack of flour		Flour extraction rate ² (percent)
				Average per working day ¹	Calendar month, total			Wheat	Millfeed	
1978										
Total.....	(X)	(X)	(X)	(X)	277,950	621,321	4,860	134.1	35.0	74.4
January.....	1,016	49,714	393	990	21,787	48,430	381	133.4	35.0	74.9
February.....	1,096	51,788	406	1,089	21,783	48,910	385	134.7	35.3	74.2
March.....	1,122	53,010	413	1,057	24,330	54,821	430	135.2	35.3	74.0
April.....	1,108	53,000	408	1,127	22,554	50,478	385	134.3	34.1	74.5
May.....	1,111	53,821	417	1,094	24,078	53,601	417	133.6	34.6	74.9
June.....	1,124	53,196	413	1,047	23,051	51,544	402	134.2	34.9	74.5
July.....	1,069	52,176	401	1,063	22,335	49,749	384	133.6	34.4	74.8
August.....	1,087	50,886	393	1,089	25,053	56,062	439	134.3	35.0	74.5
September.....	1,040	48,335	390	1,119	22,456	50,531	400	135.0	35.6	74.1
October.....	1,084	52,742	412	1,129	24,843	55,348	436	133.7	35.1	74.8
November.....	1,093	52,728	415	1,130	23,738	52,934	416	133.8	35.0	74.7
December.....	1,078	51,457	404	1,089	21,942	48,913	385	133.7	35.1	74.8
1977										
Total.....	(X)	(X)	(X)	(X)	275,784	618,125	4,878	134.5	35.4	74.4
January.....	1,060	52,359	419	1,076	22,604	50,852	403	135.0	35.7	74.1
February.....	1,145	53,775	431	1,136	22,716	50,840	409	134.3	36.0	74.5
March.....	1,180	54,965	431	1,121	25,787	57,635	456	134.1	35.4	74.5
April.....	1,058	51,443	413	1,042	21,877	49,184	392	134.9	35.8	74.1
May.....	1,061	50,954	405	1,053	22,121	49,688	398	134.8	36.0	74.2
June.....	1,044	50,196	397	990	21,769	49,072	389	135.3	35.7	74.0
July.....	1,044	48,499	383	1,028	20,566	46,149	366	134.6	35.6	74.3
August.....	1,060	50,659	397	1,062	24,419	54,844	435	134.8	35.6	74.2
September.....	1,075	49,609	386	1,113	23,381	52,244	401	134.1	34.3	74.6
October.....	1,028	49,905	386	1,114	23,396	52,352	406	134.3	34.7	74.5
November.....	1,089	52,846	410	1,133	23,785	53,159	413	134.1	34.7	74.6
December.....	1,072	53,399	419	1,062	23,363	52,106	410	133.8	35.1	74.7

(X) Not applicable.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.²Wheat flour production as compared with amount of wheat ground.

Table 3. COMMERCIAL RYE MILLING PRODUCTION, BY MONTHS: 1978 AND 1977

Month	Rye flour production (1,000 cwt. sacks)	Rye ground for flour (1,000 bushels)	Millfeed production (tons)	Average pounds ground per cwt. sack of flour		Flour extraction rate ¹ (percent)
				Rye	Millfeed	
1978						
Total.....	1,624	3,673	20,430	126.7	25.2	79.0
January.....	147	322	1,802	122.7	24.5	81.5
February.....	131	298	1,674	127.4	25.6	78.5
March.....	128	291	1,543	127.3	24.1	80.4
April.....	126	284	1,591	126.2	25.2	79.2
May.....	130	293	1,544	126.2	23.8	79.2
June.....	137	298	1,712	121.8	25.0	82.1
July.....	114	260	1,308	127.7	22.9	78.3
August.....	123	282	1,450	128.4	23.6	77.9
September.....	129	290	1,739	125.9	27.0	79.4
October.....	149	340	1,909	127.8	25.6	78.3
November.....	159	366	2,183	128.9	27.5	77.5
December.....	151	349	1,975	129.4	26.2	77.3
1977						
Total.....	1,660	3,637	19,200	122.7	23.1	81.5
January.....	140	305	1,751	122.0	25.0	82.0
February.....	130	302	1,410	130.1	21.8	76.9
March.....	141	316	1,690	125.5	22.0	79.7
April.....	135	282	1,413	117.0	20.9	85.5
May.....	126	272	1,396	120.9	22.2	82.7
June.....	131	277	1,389	118.4	21.2	84.5
July.....	125	263	1,377	117.8	22.0	84.9
August.....	151	328	1,688	121.6	22.4	82.2
September.....	143	313	1,650	122.6	23.1	81.6
October.....	136	313	1,754	128.9	25.8	77.6
November.....	149	332	1,894	124.8	25.4	80.1
December.....	153	334	1,788	122.2	23.4	81.8

¹Revised by 5 percent or more from previously published figures.²Rye flour production as compared with amount of rye ground.

Table 4. COMMERCIAL WHEAT MILLING PRODUCTION, BY GEOGRAPHIC AREAS: 1978 AND 1977

Geographic areas	1978				1977			
	Wheat ground for flour (1,000 bushels)	Wheat flour production			Wheat ground for flour (1,000 bushels)	Wheat flour production		
		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²
United States, total.....	621,321	277,950	1,058,873	103.3	618,125	275,784	1,072,143	100.9
Middle Atlantic Division.....	83,016	37,118	149,451	97.8	79,695	35,981	138,781	101.5
New York.....	66,356	30,041	123,688	95.4	62,175	28,008	105,732	103.6
North Central Division.....	335,429	150,386	570,828	103.7	338,391	150,371	589,622	99.9
Ohio.....	33,000	14,445	57,445	99.8	33,967	14,727	62,201	93.1
Indiana.....	14,878	6,430	28,090	90.4	15,165	6,486	21,483	121.1
Illinois.....	36,638	16,180	59,482	107.9	36,662	16,064	60,355	104.9
Michigan.....	10,416	4,446	20,220	87.5	9,147	4,153	20,049	81.4
Minnesota.....	70,398	31,939	128,038	98.2	70,372	32,236	128,011	98.8
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	54,552	24,780	86,310	113.4	53,502	23,881	86,762	107.6
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	76,843	34,731	123,048	111.2	78,524	35,769	135,158	103.9
South Atlantic Division.....	38,500	16,587	68,157	95.8	38,615	16,986	61,838	107.4
East South Central Division.....	30,834	13,389	49,788	105.4	31,504	13,610	48,293	111.2
Tennessee.....	23,939	10,435	37,817	108.1	24,574	10,641	36,817	112.8
West South Central Division.....	42,190	18,613	65,893	111.0	40,507	18,198	63,530	111.5
Oklahoma.....	17,146	7,889	28,345	110.9	16,511	7,526	28,037	105.4
Texas.....	18,259	7,830	26,500	114.2	17,059	7,497	28,158	105.0
Mountain Division.....	34,758	15,716	60,175	105.1	33,688	15,158	66,531	88.7
Montana.....	8,395	3,931	13,736	110.5	8,170	3,861	17,797	84.1
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific Division.....	56,594	26,141	94,581	108.3	55,725	25,480	103,548	96.1
Washington.....	16,573	7,413	27,781	104.2	15,696	7,076	27,481	102.8
Oregon.....	9,441	4,293	19,800	85.4	7,398	4,238	20,025	83.1
California and Hawaii.....	30,580	14,435	47,000	120.9	30,631	14,166	56,042	99.2

Notes: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosing figures for individual companies.

¹Capacity as reported for December of each year.²Estimated annual capacity is obtained by multiplying daily capacity by the number of work days during the year: 254 for 1978, and 255 for 1977.

These figures are calculated on the basis of a five day week with allowances for the following holidays unless such holidays fall on Saturday: January 1, Memorial Day, July 4, Thanksgiving Day, and December 25.

Table 5. PRODUCTION AND MILL STOCKS OF WHEAT FLOUR, BY QUARTERS: 1978 AND 1977

Quarter	Production (1,000 cwt. sacks)	Mill stocks (1,000 cwt. sacks)
1978		
First quarter.....	67,900	4,096
Second quarter.....	69,683	3,459
Third quarter.....	69,844	3,342
Fourth quarter.....	70,523	3,214
1977		
First quarter.....	71,107	4,248
Second quarter.....	65,767	4,167
Third quarter.....	68,366	3,537
Fourth quarter.....	70,544	4,160

Table 6. DURUM WHEAT PRODUCTS: 1978 AND 1977

Item	1978		1977	
	Jan. 1- June 30	July 1- Dec. 31	Jan. 1- June 30	July 1- Dec.31
Durum wheat ground (thousand bushels).....	17,683	19,748	18,673	19,056
Straight semolina and durum flour produced (thousand sacks (cwt.))...	7,786	8,702	8,110	8,253
Blended semolina and durum flour produced (thousand sacks (cwt.))....	(D)	(D)	(D)	(D)

(D) Withheld to avoid disclosing figures for individual companies.

Table 7. PRODUCTION, EXPORTS, AND IMPORTS OF WHEAT FLOUR: 1978

(Quantity in 1,000 cwt.; value in \$1,000)

Product code	Item	Quantity produced	Exports of domestic merchandise ^{1 2}		Percent exports to manufac- turers' production
			Quantity	Value	
20411 --	Wheat flour.....	277,950	21,523	189,259	7.7

Note: Comparison of domestic production and export codes is as follows:

<u>Domestic output</u>	<u>Exports</u>
20411 -- Wheat flour	1,314,010

¹The data as shown for exports have been revised to include Schedule B code 131.4020 which was previously excluded in error.²Source: Bureau of the Census Report FT-410, U.S. Exports of Domestic Merchandise; SIC-Based Products and Area.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1977 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1977 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Scope of Survey—This survey includes firms engaged in the respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted and unadjusted data in table 2. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census

Method 11 seasonal adjustment program. This program is a ratio-to-moving average method. It largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data provide a better measure of the month-to-month variations which are due to factors other than seasonal pattern. Additional information concerning seasonal adjustment is available in the seasonal adjustment supplement issued in this series.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

d. Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. "Direct" vs "Total" Commodity Export and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

HISTORICAL NOTE

The current M20A series of monthly reports with annual summaries of wheat ground and wheatmilling products originated in May 1923. Data by States have been published monthly since 1927. Beginning in 1931 and ending with the June 1947 report, monthly wheat flour production by capacity groups was published. The annual summary report during the years 1931 to 1964 also contained a table showing production by capacity groups. Past copies of this report and other Current Industrial Reports can be found in the Federal Depository Library in your area. These libraries keep Current Industrial Reports (called Facts for Industry, before 1959) permanently available.

RELATED REPORTS

A monthly report is also published in this series.

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M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-5042

ACKNOWLEDGMENTS

This report was prepared in the Industry Division under the direction of Robert J. Nealon, Chief, Current Nondurables Branch and Carole A. Klein, Chief, Food, Apparel, and Textiles Section. Geraldine Bynum was directly responsible for the review of the data and preparation of the report. Milton Eisen, Chief of the Division, and John R. Wikoff, Assistant Chief for Current Programs, provided overall direction and coordination to this project.



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3. 158:

Flour Milling Products



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Seasonal Adjustment Supplement 1971-1978

M20A Supplement
Issued February 1979

This report presents seasonally adjusted data for the years 1971 to 1978 for a number of the more important series published monthly in Current Industrial Reports Series M20A, Flour Milling Products. The data for the years 1959 to 1970

were excluded from this publication because there were no significant changes. These data are available in the M20A Seasonal Adjustment Supplement published on March 31, 1971.

TABLE 1. WHEAT FLOUR PRODUCTION, AVERAGE PER WORKING DAY

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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SEASONALLY ADJUSTED SERIES--(1,000 CWT. SACKS)

1971..	1011	997	965	977	1004	991	975	1005	988	954	931	919
1972..	944	931	983	998	998	1024	1012	936	974	966	980	1001
1973..	995	1031	1018	986	999	985	1024	995	976	1020	1002	1027
1974..	1046	1101	991	924	933	959	926	953	1003	993	1038	979
1975..	956	933	958	1029	1031	1021	1065	1047	1068	1069	1080	995
1976..	1071	1011	1057	1084	1081	1069	1086	1157	1052	1062	1034	995
1977..	1060	1145	1180	1058	1061	1044	1044	1060	1075	1028	1089	1072
1978..	1016	1096	1122	1108	1111	1124	1069	1087	1040	1084	1093	1078

ORIGINAL SERIES--(1,000 CWT. SACKS)

1971..	1045	988	913	894	1011	954	919	1007	1054	1033	957	911
1972..	986	952	916	983	958	961	991	926	1067	1022	1005	1040
1973..	991	1023	978	939	957	962	976	972	1103	1069	1005	1071
1974..	1034	1093	973	867	887	960	878	962	1088	1036	1090	979
1975..	927	925	951	981	1016	980	1008	1083	1132	1100	1171	978
1976..	1062	1054	1003	1017	1106	1015	1048	1169	1117	1147	1062	959
1977..	1076	1136	1121	1042	1053	990	1028	1062	1113	1114	1133	1062
1978..	990	1089	1057	1127	1094	1047	1063	1089	1119	1129	1130	1089

SEASONAL FACTORS WITH TRADING-DAY--PERCENT

1971..	103.3	99.1	94.6	91.5	100.6	96.2	94.2	100.2	106.6	108.2	102.7	99.0
1972..	104.4	102.2	93.1	98.4	95.9	93.8	97.9	98.9	109.5	105.8	102.5	103.8
1973..	99.6	99.2	96.0	95.2	95.7	97.6	95.3	97.7	113.0	104.8	100.3	104.2
1974..	98.8	99.2	98.1	93.8	95.1	100.0	94.8	100.9	108.4	104.3	104.9	100.0
1975..	96.9	99.1	99.3	95.3	98.5	96.0	94.6	103.4	106.0	102.8	108.4	98.2
1976..	99.1	104.2	94.9	93.8	102.3	94.9	96.5	101.0	106.1	107.9	102.6	96.3
1977..	101.4	99.2	95.0	98.5	99.2	94.7	95.8	99.1	110.0	108.4	104.0	99.0
1978..	97.4	99.3	94.2	101.7	98.4	93.1	99.4	100.2	107.6	104.1	103.4	101.0

SEASONAL FACTORS WITH TRADING-DAY, ONE YEAR AHEAD--PERCENT

1979..	96.0	99.4	97.4	97.9	98.4	97.2	95.8	99.1	110.5	102.6	101.5	101.8
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Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Carole Klein, (301) 763-7541.

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TABLE 2. MILLFEED PRODUCTION

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

SEASONALLY ADJUSTED SERIES--(1,000 TONS)

1971..	362	366	358	356	363	368	359	365	357	347	335	347
1972..	355	343	358	366	366	370	361	345	352	358	359	364
1973..	372	371	361	365	365	360	368	367	365	361	370	373
1974..	381	379	378	355	350	354	353	358	381	393	407	383
1975..	368	353	365	414	397	400	404	396	404	419	386	391
1976..	398	384	394	412	406	409	428	432	419	413	404	403
1977..	419	431	431	413	405	397	383	397	386	386	410	419
1978..	393	406	413	408	417	413	401	393	390	412	415	400

ORIGINAL SERIES--(1,000 TONS)

1971..	361	345	363	335	347	366	349	378	378	368	338	351
1972..	356	342	361	338	359	363	343	369	369	384	361	358
1973..	383	353	366	334	362	349	355	388	381	393	367	364
1974..	395	361	375	336	342	339	347	383	394	433	401	375
1975..	371	336	366	396	389	378	403	417	429	453	377	386
1976..	396	373	408	392	392	401	419	464	442	435	403	395
1977..	403	409	456	392	398	389	366	435	401	406	413	410
1978..	381	385	430	385	417	402	384	438	400	435	416	381

SEASONAL FACTORS WITH TRADING-DAY--PERCENT

1971..	99.7	94.1	101.2	94.0	95.4	99.5	97.1	103.5	105.6	106.0	100.9	100.9
1972..	100.2	99.6	100.7	92.3	97.9	98.1	95.0	106.8	104.7	107.2	100.5	98.1
1973..	102.7	95.0	101.2	91.4	99.1	96.8	96.4	105.5	104.3	108.9	99.2	97.4
1974..	103.6	95.1	99.2	94.4	97.5	95.6	98.1	106.8	103.4	110.2	98.3	97.9
1975..	100.6	95.1	100.2	95.6	98.0	94.5	99.5	105.2	105.9	107.9	97.5	98.6
1976..	99.5	97.1	103.5	95.0	96.4	98.0	97.9	107.4	105.4	105.2	99.7	97.9
1977..	96.0	94.8	105.7	94.7	98.2	97.9	96.8	109.5	101.0	105.0	100.6	97.7
1978..	96.8	94.7	103.9	94.4	99.9	97.3	95.6	111.4	102.4	105.7	100.1	95.2

SEASONAL FACTORS WITH TRADING-DAY, ONE YEAR AHEAD--PERCENT

1979..	98.0	94.6	104.3	93.7	101.6	96.7	96.8	109.5	101.3	106.9	99.4	95.2
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TABLE 3. WHEAT GROUND FOR FLOUR

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SEASONALLY ADJUSTED SERIES--(1,000 BUSHELS)												
1971..	46740	46289	46334	46063	46873	47581	46670	47936	46708	45285	44270	45444
1972..	46043	44482	46509	47105	47766	48686	46549	44480	45532	46920	46546	46854
1973..	47508	47711	47174	47505	47111	46475	47730	47374	47109	46184	47656	48753
1974..	48830	48789	47793	45013	44566	45077	44601	44781	47407	48897	49781	47172
1975..	45724	43833	44817	50663	48856	49387	50204	49123	50384	52565	48432	48755
1976..	49978	48880	50180	52304	51267	51641	53439	54587	51740	51650	50376	50711
1977..	52359	53775	54965	51443	50954	50196	48499	50659	49609	49905	52846	53399
1978..	49714	51788	53010	53000	53821	53196	52176	50886	48335	52742	52728	51435
ORIGINAL SERIES--(1,000 BUSHELS)												
1971..	46405	44038	46705	43525	44970	46658	45164	49403	49301	48166	44492	46265
1972..	45942	44464	46882	43792	46897	47174	44155	47459	47713	50121	46822	46380
1973..	48559	45438	47790	43717	46800	44713	45647	49944	49154	50325	47274	47926
1974..	50404	46416	47498	42657	43535	42932	43565	47665	49104	53771	49135	46280
1975..	46045	41658	44896	48602	47919	46513	49718	51379	53627	56685	47421	48212
1976..	49976	47296	51695	49946	49488	50430	52145	57825	55294	54225	50273	49691
1977..	50852	50840	57635	49184	49688	49072	46149	54844	52244	52352	53159	52106
1978..	48430	48910	54821	50478	53601	51544	49749	56062	50506	55348	52934	48893
SEASONAL FACTORS WITH TRADING-DAY--PERCENT												
1971..	99.3	95.1	100.8	94.5	95.9	98.1	96.8	103.1	105.6	106.4	100.5	101.8
1972..	99.8	100.0	100.8	93.0	98.2	96.9	94.9	106.7	104.8	106.8	100.6	99.8
1973..	102.2	95.2	101.3	92.0	99.3	96.2	95.6	105.4	104.3	109.0	99.2	98.3
1974..	103.2	95.1	99.4	94.8	97.7	95.2	97.7	106.4	103.6	110.0	98.7	98.1
1975..	100.7	95.0	100.2	95.9	98.1	94.2	99.0	104.6	106.4	107.8	97.9	97.8
1976..	100.0	96.8	103.0	95.5	96.5	97.7	97.6	105.9	106.9	105.0	99.8	97.8
1977..	97.1	94.5	104.9	95.6	97.5	97.8	95.8	108.4	103.0	104.9	100.6	97.6
1978..	97.4	94.4	103.4	95.2	99.6	96.9	97.3	110.2	109.5	104.9	100.4	97.1
SEASONAL FACTORS WITH TRADING-DAY, ONE YEAR AHEAD--PERCENT												
1979..	99.1	94.3	103.7	94.5	101.2	96.5	95.8	108.4	103.4	106.7	99.4	95.1

Table 4. AVERAGE PERCENTAGE AND RELATED MEASURES FOR SERIES COMPONENTS

Item	Average percentage changes			Ratio of irregular component to cyclical component ($\frac{\bar{I}}{\bar{C}}$)	Number of months for cyclical dominance (MCD)	I/C for MCD span	Average duration of run			MCD
	Seasonally adjusted series (\bar{C})	Irregular component (\bar{I})	Cyclical component (\bar{C})				(1)	(2)	(3)	
Wheat flour production, average per working day.....	3.14	3.03	.67	4.54	6	1.08	1.62	1.51	4.85	3.15
Millfeed production.....	2.45	2.19	.66	3.30	6	.83	2.08	1.79	4.68	3.41
Wheat ground for flour.....	2.65	2.40	.64	3.78	6	.95	1.96	1.79	4.68	2.93

The seasonal adjustment program largely eliminates the effect of normal seasonal variations (including variations due to vacations, weather, etc.) as measured over the time period for which data were used. The resulting information thus provides a better measure than the original data of the month-to-month variations which are due to factors that are not associated with a repetitive seasonal pattern.

The seasonal adjustments were made using the X-11 variant of the Census Bureau's seasonal adjustment program. This program is amply described in the literature on this method.¹ It should be noted that the data included in this report are adjusted on an establishment basis, prior to tabulation for variation in the length of the reporting period such as 4-week, 5-week, or calendar month.

For each series included in this report the following tables are shown:

- (1) Seasonally-adjusted data
- (2) Data without seasonal adjustment (original series)
- (3) Seasonal adjustment factors. The seasonally-adjusted data are obtained by dividing the unadjusted data by the seasonal factors for the specific month
- (4) Average percentage changes and related measures for each series.

The seasonally adjusted data were developed for each of the detailed series shown. Adjusted data for the summary totals are obtained by summarizing the adjusted lower order totals to higher levels. The seasonal factors for these higher level totals are implied factors developed by dividing the unadjusted data by the adjusted data and will differ somewhat from that which would have been obtained by direct seasonal adjustment of the data.

TRADING-DAY FACTORS

Variations in the rate of activity that arises from the existence of different numbers of trading days in the same month for different years can be an important cause of month-to-month irregular fluctuations. Unlike some other causes of irregular fluctuations such as unexpected economic developments, unusual weather, and statistical errors, trading-day irregularities can be approximately identified and removed so

that the underlying trend-cycle stands out more clearly. Hence, it is often possible to reduce the irregular factor by a trading-day adjustment.

BRIEF DEFINITIONS OF MEASURES SHOWN IN TABLE 4

The following are brief definitions; more complete explanations appear in **Electronic Computers and Business Indicators**, by Julius Shiskin, issued as Occasional Paper 57 by the National Bureau of Economic Research, 1957 (reprinted from **Journal of Business**, October 1957).

\overline{CI} is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series (i.e., the series after adjustment for measurable seasonal, trading-day, and holiday variations).

\overline{I} is the same for the irregular component, obtained by dividing the cyclical component into the seasonally adjusted series.

\overline{C} is the same for the cyclical component, a smooth, flexible moving average of the seasonally adjusted series.

$\overline{I/\overline{C}}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series. It is shown for 1-month spans and for spans of the period of MCD. When MCD is "6," no I/C ratio is shown for the MCD period.

MCD (months for cyclical dominance) provides an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. It is small for smooth series and large for irregular series. In deriving MCD, percentage changes are computed separately for the irregular component and the cyclical component over 1-month spans (Jan.-Feb., Feb.-Mar., etc.), 2-month spans (Jan.-Mar., Feb.-Apr., etc.), up to 12-month spans. Averages, without regard to sign, are then computed for the changes over each span. MCD is the shortest span in months for which the average percentage change (without regard to sign) in the cyclical component is larger than the average percentage change (without regard to sign) in their regular component, and remains so. Thus, it indicates the point at which fluctuations in the seasonally adjusted series became dominated by cyclical rather than irregular movements. All series with an MCD greater than "5" are shown as "6."

Average Duration of Run (ADR) is another measure of smoothness and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD curve. The MCD is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

¹ **Electronic Computers and Business Indicators**, National Bureau of Economic Research Occasional Paper 57 (New York, 1957); **Tests and Revisions of Bureau of the Census Methods of Seasonal Adjustments**, Bureau of the Census Technical Paper No. 5 (Washington, 1961, \$1.00); **The X-11 Variant of the Census Method II Seasonal Adjustment Program**, Bureau of the Census Technical Paper No. 15 (Washington, 1967, \$0.50).

Flour Milling Products



U.S. Department of Commerce
BUREAU OF THE CENSUS

JANUARY 1979

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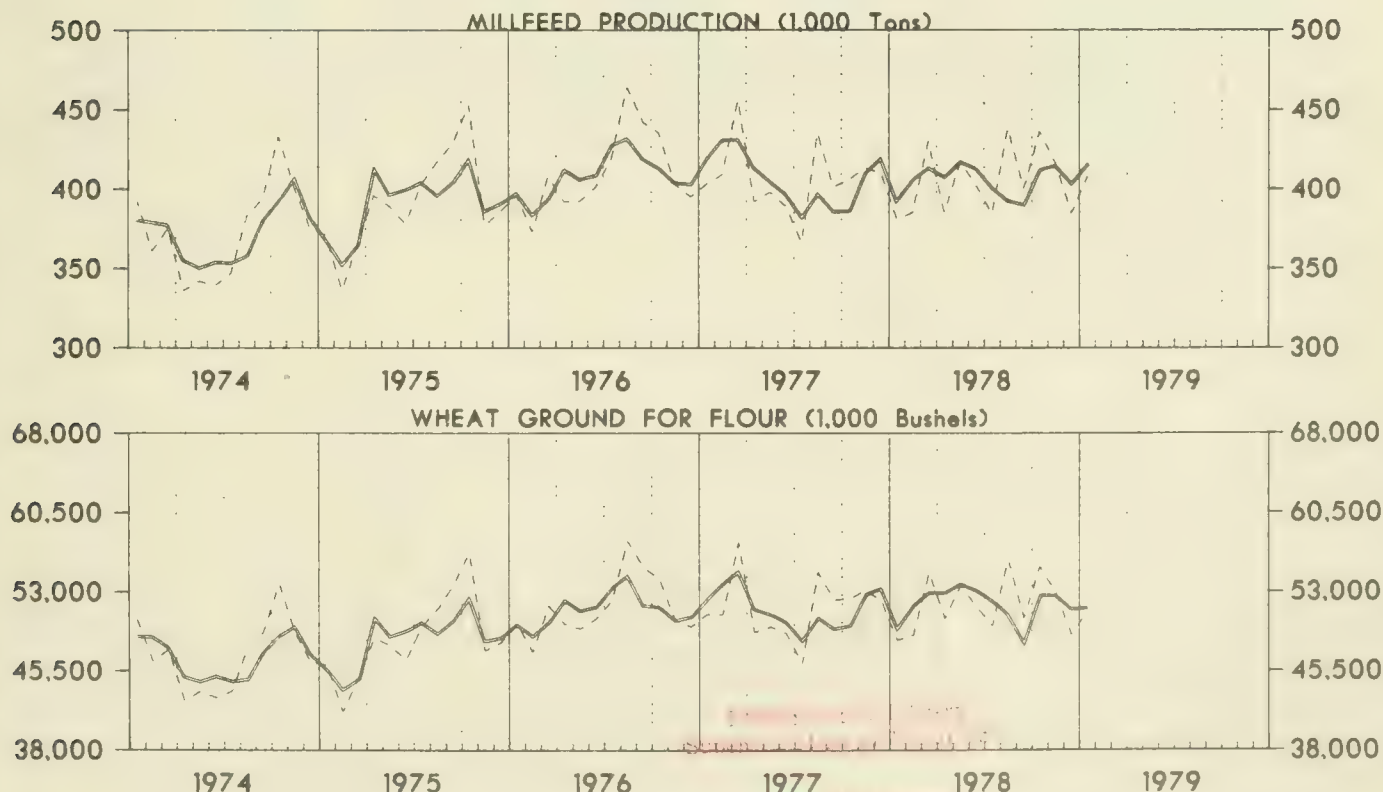
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 6.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1974 TO 1979

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1979			
January.....	1,084	416	51,535
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,040	390	48,335
August.....	1,087	393	50,886
July.....	1,069	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788
January.....	1,016	393	49,714
1977			
December.....	1,072	419	53,399
November.....	1,089	410	52,846
October.....	1,028	386	49,905
September.....	1,075	386	49,609
August.....	1,060	397	50,659
July.....	1,044	383	48,499
June.....	1,044	397	50,196
May.....	1,061	405	50,954
April.....	1,058	413	51,443
March.....	1,180	431	54,965
February.....	1,145	431	53,775
January.....	1,060	419	52,359

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1979								
January.....	1,041	22,898	407,611	51,064	(NA)	1,049	99.2	74.7
1978								
December.....	1,097	21,942	384,618	48,913	3,214	1,049	104.6	74.8
November.....	1,130	23,738	416,152	52,934	(NA)	1,057	106.9	74.7
October.....	1,129	24,843	436,433	55,348	(NA)	1,057	106.8	74.6
September.....	1,119	22,395	400,263	50,506	3,342	1,057	105.9	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,036	105.1	74.4
July.....	1,117	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,086	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	1,037	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5
January.....	1,076	22,604	403,353	50,852	(NA)	1,041	103.4	74.1

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

TABLE 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION
MILL STOCKS, AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	JANUARY 1979	DECEMBER 1978	JANUARY 1978
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	3,013	3,262	3,454
2041153	STRAIGHT SEMOLINA DURUM FLOUR.	M CWT	1,350	1,452	1,506
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	325	349	322
2041611	RYE FLOUR PRODUCTION.	M CWT	134	151	147
2041618	RYE MILLFEED PRODUCTION.	TONS	1,937	1,975	1,802
2041611	RYE FLOUR STOCKS (1).	M CWT	(NA)	23	(NA)
	24 HOUR CAPACITY (1).	DO	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

TABLE 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHELS; WHEAT PRODUCTION IN THOUSANDS OF HUNDREDWEIGHT)

GEOGRAPHIC AREA	JANUARY 1979		DECEMBER 1978		JANUARY 1978	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL.	51,064	22,898	48,913	21,942	48,430	21,787
MIDDLE ATLANTIC.	7,313	3,306	7,204	3,236	6,087	2,692
NEW YORK.	6,015	2,724	5,862	2,645	4,897	2,162
NORTH CENTRAL.	26,374	11,809	25,265	11,320	26,579	12,106
OHIO.	2,962	1,289	2,674	1,173	2,389	1,032
INDIANA.	1,425	613	1,314	561	1,148	498
ILLINOIS.	2,846	1,262	2,673	1,198	2,628	1,177
MICHIGAN.	836	371	722	318	733	321
MINNESOTA.	5,084	2,306	5,718	2,592	5,904	2,683
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,058	1,837	3,900	1,767	3,882	1,978
NEBRASKA.	(D)	(D)	(D)	(D)	(D)	(D)
KANSAS.	6,238	2,826	5,436	2,475	6,650	2,964
SOUTH ATLANTIC.	3,148	1,381	3,201	1,408	2,841	1,220
EAST SOUTH CENTRAL.	2,554	1,111	2,415	1,053	2,674	1,101
TENNESSEE.	1,965	860	1,846	813	2,128	869
WEST SOUTH CENTRAL.	3,564	1,595	3,368	1,448	3,280	1,486
OKLAHOMA.	1,536	705	1,258	579	1,396	645
TEXAS.	1,477	646	1,378	611	1,421	638
MOUNTAIN.	2,928	1,338	2,797	1,243	2,676	1,214
MONTANA.	667	307	721	326	619	287
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	5,183	2,358	4,663	2,234	4,293	1,968
WASHINGTON.	1,677	753	1,303	591	1,150	517
OREGON.	785	364	738	337	721	330
CALIFORNIA AND HAWAII.	2,721	1,241	2,622	1,306	2,422	1,121

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	December 1978	November 1978	12 months through December 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (131-010 AND 131-030) (1,000 cwt.)			
Total.....	217	246	2,516
Egypt.....	83	-	379
Guatemala.....	-	7	24
Colombia.....	-	-	25
Ecuador.....	-	-	4
Brazil.....	-	-	5
Israel.....	10	19	123
India.....	17	-	133
Chile.....	15	43	178
Sri Lanka (Ceylon).....	-	22	95
Philippine Republic.....	42	101	483
Morocco.....	-	46	457
Other.....	50	8	610
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	456	306	17,837
Nicaragua.....	-	-	41
Jamaica.....	62	34	552
Brazil.....	3	-	5
Iceland.....	6	7	45
Jordan.....	-	-	-
Saudi Arabia.....	232	116	817
Sri Lanka (Ceylon).....	-	13	3,076
Egypt.....	-	-	3,725
Philippine Republic.....	-	-	6,419
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	153	136	3,259
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	90,027	92,314	1,226,992
U.S.S.R.....	4,029	2,677	107,486
Venezuela.....	3,010	22	27,935
Peru.....	942	9,803	16,216
Brazil.....	4,650	1,328	104,257
Portugal.....	1,693	2,846	20,537
Iran.....	908	1,422	44,306
Indonesia.....	890	3,899	19,696
Korean Republic.....	4,813	-	61,468
China (Taiwan).....	1,910	9,393	21,860
Japan.....	9,849	-	120,344
Egypt.....	706	3,616	41,001
Nigeria.....	2,410	56,368	31,271
Other.....	54,217	56,368	620,484

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: DECEMBER 1978

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	21,942	(NA)	673	5,322	3.1	(NA)				21,269	(NA)

Note: Comparison of Standard Industrial Classification codes Schedule B Export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	

- Represents zero. (NA) Not available.

¹Source: Bureau of Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour-mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

The data for 1977 and 1976 as shown in tables 1A and 1B of this report have been revised. Approximately six establishments were added to this survey in January 1978 based upon an extensive reconciliation with the 1976 Annual Survey of Manufactures (ASM). Data for 1976 and 1977 have been estimated for these plants based upon their 1976 ASM data and their 1978 M20A reports. Revised State data for 1976 and 1977 will be shown in a separate report to be issued in the next few weeks.

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The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the nonseasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal patterns.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no com-

able domestic output classification. The relationships shown in this report should be considered only as approximations. In addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

(a) *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c. i. f. (cost, insurance, and freight), duty, and other charges to the import point.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output and imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

(f) *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are

incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

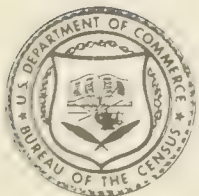
Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
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3. 158:

Flour Milling Products



FEBRUARY 1979

U.S. Department of Commerce
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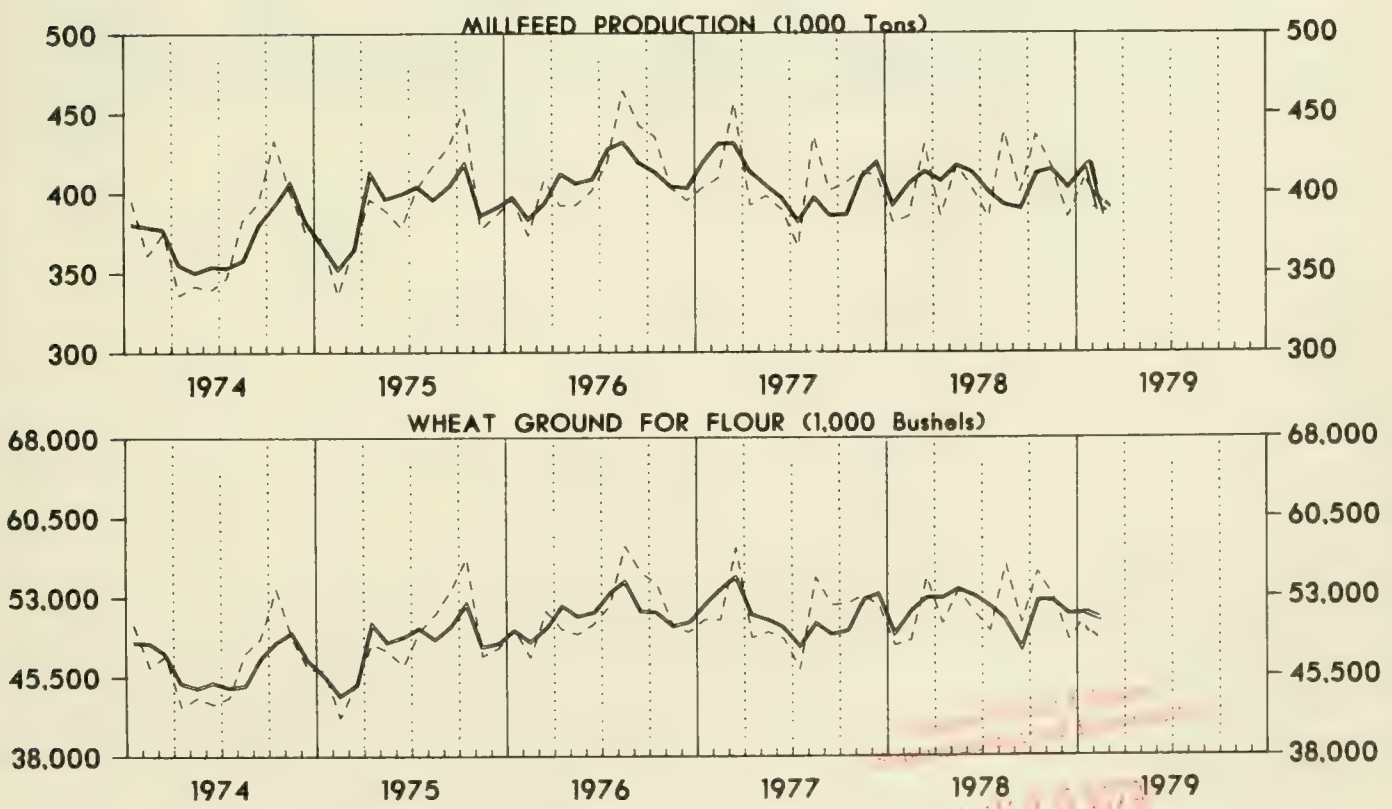
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 6.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1974 TO 1979

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807. For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	wheat ground for flour (1,000 bushels)
1979			
February.....	1,084	396	51,037
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,040	390	46,147
August.....	1,087	393	50,886
July.....	^r 1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788
January.....	^r 1,065	393	49,714
1977			
December.....	1,072	419	53,399
November.....	1,089	410	52,846
October.....	1,028	386	49,905
September.....	1,075	386	49,609
August.....	1,060	397	50,659
July.....	1,044	383	48,499
June.....	1,044	397	50,196
May.....	1,061	405	50,954
April.....	1,058	413	51,443
March.....	1,180	431	54,965
February.....	1,145	431	53,775

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25. ^rRevised.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1977 TO 1979

(Not seasonally adjusted)								
Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1979								
February.....	1,077	21,558	374,701	48,128	(NA)	1,049	102.8	74.7
January.....	1,037	22,817	403,584	50,886	(NA)	1,049	98.9	74.7
1978								
December.....	1,097	21,942	384,618	48,913	3,214	1,049	104.6	74.8
November.....	1,130	23,738	416,152	52,934	(NA)	1,057	106.9	74.7
October.....	1,129	24,843	436,433	55,348	(NA)	1,057	106.8	74.6
September.....	1,119	22,395	400,263	50,531	3,342	1,057	105.9	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,036	105.1	74.4
July.....	1,117	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,086	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	1,037	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5

(NA) Not available. ^TRevised.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

TABLE 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION
MILL STOCKS, AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	FEBRUARY 1979	JANUARY 1979	FEBRUARY 1978
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	3,152	3,012	3,285
2041153	STRAIGHT SEMOLINA DURUM FLOUR.	M CWT	1,445	1,349	1,460
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	274	325	298
2041611	RYE FLOUR PRODUCTION.	M CWT	115	134	131
2041618	RYE MILLFEED PRODUCTION.	TONS	1,652	1,937	1,674
2041611	RYE FLOUR STOCKS (1).	M CWT	(NA)	(NA)	(NA)
	24 HOUR CAPACITY (1).	DO	10	10	14

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

TABLE 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHEL; WHEAT PRODUCTION IN THOUSANDS OF HUNDREDWEIGHT)

GEOGRAPHIC AREA	FEBRUARY 1979		JANUARY 1979		FEBRUARY 1978	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL.	48,128	21,558	50,886	22,817	48,910	21,783
MIDDLE ATLANTIC.	6,891	3,136	7,149	3,229	6,573	2,916
NEW YORK.	5,524	2,498	5,845	2,644	5,155	2,284
NORTH CENTRAL.	24,613	11,068	26,375	11,809	26,825	12,003
OHIO.	2,587	1,126	2,963	1,289	2,611	1,133
INDIANA.	1,340	562	1,425	613	1,092	473
ILLINOIS.	2,787	1,237	2,846	1,262	3,011	1,330
MICHIGAN.	745	327	836	371	840	357
MINNESOTA.	5,032	2,270	5,084	2,306	5,391	2,346
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	3,644	1,691	4,058	1,837	4,321	1,934
NEBRASKA.	(D)	(D)	(D)	(D)	(D)	(D)
KANSAS.	5,521	2,492	6,238	2,826	6,223	2,939
SOUTH ATLANTIC.	3,340	1,466	3,147	1,381	3,243	1,438
EAST SOUTH CENTRAL.	2,486	1,081	2,554	1,111	2,420	1,024
TENNESSEE.	1,906	834	1,965	860	1,876	796
WEST SOUTH CENTRAL.	3,260	1,462	3,550	1,591	3,406	1,458
OKLAHOMA.	1,271	585	1,536	705	1,383	634
TEXAS.	1,414	624	1,463	642	1,566	647
MOUNTAIN.	2,552	1,165	2,928	1,338	2,543	1,175
MONTANA.	661	302	667	307	621	319
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	4,986	2,180	5,183	2,358	3,900	1,769
WASHINGTON.	1,361	615	1,677	753	1,070	481
OREGON.	835	327	785	364	634	291
CALIFORNIA AND HAWAII.	2,790	1,238	2,721	1,241	2,196	997

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	January 1979	December 1978	1 month through January 1979
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	199	217	199
Egypt.....	81	83	81
Guatemala.....	-	-	-
Colombia.....	-	-	-
Ecuador.....	-	-	-
Brazil.....	-	-	-
Israel.....	-	10	-
India.....	6	17	6
Chile.....	11	15	11
Sri Lanka (Ceylon).....	26	-	26
Philippine Republic.....	-	42	-
Morocco.....	-	-	-
Other.....	75	50	75
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	300	456	300
Nicaragua.....	-	-	-
Jamaica.....	49	62	49
Brazil.....	-	3	-
Iceland.....	3	6	3
Jordan.....	-	-	-
Saudi Arabia.....	109	232	109
Sri Lanka (Ceylon).....	-	-	-
Egypt.....	-	-	-
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	139	153	139
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	70,400	90,027	70,400
U.S.S.R.....	4,038	4,029	4,038
Venezuela.....	1,911	3,010	1,911
Peru.....	-	942	-
Brazil.....	2,894	4,650	2,894
Portugal.....	-	1,693	-
Iran.....	3,582	908	3,582
Indonesia.....	1,382	890	1,382
Korean Republic.....	4,717	4,813	4,717
China (Taiwan).....	3,063	1,910	3,063
Japan.....	12,112	9,849	12,112
Egypt.....	6,663	706	6,663
Nigeria.....	2,067	2,410	2,067
Other.....	27,971	54,217	27,971

Note: Data in this table are taken from Foreign Trade publication FT-140, U.S. Exports. The Schedule B codes are shown above.
- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: JANUARY 1979

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	22,817	(NA)	499	3,323	2.1	(NA)	-	-	-	22,318	(NA)

Note: Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

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¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

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The data for 1977 and 1976 as shown in tables 1A and 1B of this report have been revised. Approximately six establishments were added to this survey in January 1978 based upon an extensive reconciliation with the 1976 Annual Survey of Manufactures (ASM). Data for 1976 and 1977 have been estimated for these plants based upon their 1976 ASM data and their 1978 M20A reports. Revised State data for 1976 and 1977 will be shown in a separate report to be issued in the next few weeks.

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3. 158:

Flour Milling Products



U.S. Department of Commerce
BUREAU OF THE CENSUS

MARCH 1979

M20A(79)-3
Issued May 1979

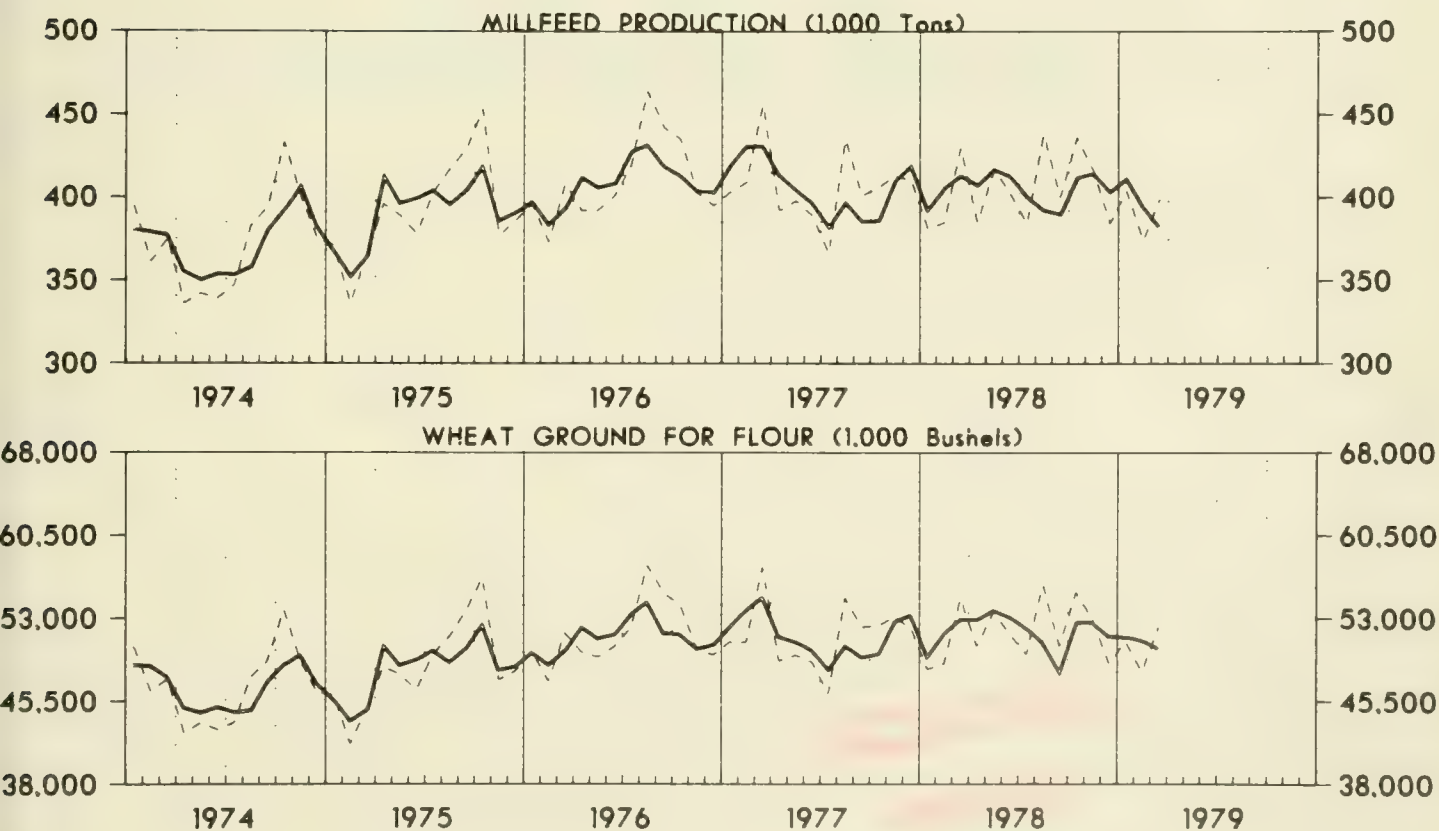
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 6.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1974 TO 1979

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1977 to 1979

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1979			
March.....	1,089	383	50,327
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	^r 1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788
January.....	^r 1,065	393	49,714
1977			
December.....	1,072	419	53,399
November.....	1,089	410	52,846
October.....	1,028	386	49,905
September.....	1,075	386	49,609
August.....	1,060	397	50,659
July.....	1,044	383	48,499
June.....	1,044	397	50,196
May.....	1,061	405	50,954
April.....	1,058	413	51,443

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

^rRevised.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1977 to 1979

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ³ (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1979								
March.....	1,061	23,351	399,399	52,200	3,477	1,048	101.3	74.6
February.....	1,077	21,542	373,702	48,163	(NA)	1,049	102.7	74.5
January.....	1,037	22,817	403,584	50,886	(NA)	1,049	98.9	74.7
1978								
December.....	1,097	21,942	384,942	48,913	3,214	1,049	104.6	74.8
November.....	1,130	23,738	416,152	52,934	(NA)	1,057	106.9	74.7
October.....	1,129	24,843	436,433	55,348	(NA)	1,057	106.8	74.6
September.....	^r 1,123	^r 22,456	400,263	^r 50,531	3,342	1,057	105.9	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,036	105.1	74.4
July.....	1,117	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,086	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	1,037	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1

(NA) Not available. ^rRevised.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

TABLE 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION
MILL STOCKS, AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	MARCH 1979	FEBRUARY 1979	MARCH 1978
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND	M BU	3,820	3,201	3,326
2041153	STRAIGHT SEMOLINA DURUM FLOUR	M CWT	1,744	1,469	1,476
2041155	BLENDED SEMOLINA DURUM FLOUR	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR	M BU	340	274	291
2041611	RYE FLOUR PRODUCTION	M CWT	147	115	128
2041618	RYE MILLFEED PRODUCTION	TONS	1,958	1,652	1,543
2041611	RYE FLOUR STOCKS (1)	M CWT	21	(NA)	30
	24 HOUR CAPACITY (1)	DO	10	10	16

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

TABLE 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHEL; WHEAT PRODUCTION IN THOUSANDS OF HUNDREDWEIGHT)

GEOGRAPHIC AREA	MARCH 1979		FEBRUARY 1979		MARCH 1978	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL	52,200	23,351	48,163	21,542	54,821	24,330
MIDDLE ATLANTIC	7,060	3,169	6,894	3,137	6,895	2,841
NEW YORK	5,793	2,611	5,527	2,499	5,417	2,451
NORTH CENTRAL	27,063	12,121	24,609	11,067	29,741	13,330
OHIO	3,152	1,387	2,587	1,126	3,000	1,325
INDIANA	1,300	562	1,340	562	1,323	570
ILLINOIS	2,983	1,322	2,787	1,237	3,165	1,414
MICHIGAN	935	412	741	326	971	406
MINNESOTA	5,526	2,500	5,032	2,270	6,168	2,808
IOWA	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI	3,860	1,735	3,644	1,691	5,069	2,346
NEBRASKA	(D)	(D)	(D)	(D)	(D)	(D)
KANSAS	6,061	2,750	5,521	2,492	6,711	2,955
SOUTH ATLANTIC	3,370	1,477	3,340	1,466	3,477	1,525
EAST SOUTH CENTRAL	2,775	1,307	2,486	1,081	2,835	1,244
TENNESSEE	2,113	1,020	1,906	834	2,252	990
WEST SOUTH CENTRAL	3,454	1,552	3,334	1,497	3,837	1,719
OKLAHOMA	1,352	662	1,271	585	1,606	733
TEXAS	1,507	668	1,488	659	1,668	737
MOUNTAIN	2,921	1,337	2,552	1,165	3,070	1,399
MONTANA	682	309	661	302	721	341
UTAH	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC	5,557	2,388	4,948	2,129	4,966	2,272
WASHINGTON	1,498	681	1,361	615	1,407	634
OREGON	939	353	813	302	798	358
CALIFORNIA AND HAWAII	3,120	1,354	2,774	1,212	2,761	1,280

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	February 1979	January 1978	2 months through February 1979
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	170	199	369
Egypt.....	98	81	179
Guatemala.....	3	-	3
Colombia.....	-	-	-
Ecuador.....	-	-	-
Brazil.....	-	-	-
Israel.....	-	-	-
India.....	3	6	9
Chile.....	25	11	36
Sri Lanka (Ceylon).....	-	26	26
Philippine Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	41	75	116
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	1,105	300	1,405
Nicaragua.....	-	-	-
Jamaica.....	47	49	96
Brazil.....	-	-	-
Iceland.....	-	3	3
Jordan.....	-	-	-
Saudi Arabia.....	219	109	328
Sri Lanka (Ceylon).....	-	-	-
Egypt.....	816	-	816
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	23	139	162
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	67,105	70,400	137,505
U.S.S.R.....	10,316	4,038	14,354
Venezuela.....	38	1,911	1,949
Peru.....	103	-	103
Brazil.....	4,998	2,894	7,892
Portugal.....	2,266	-	2,266
Iran.....	870	3,582	4,452
Indonesia.....	513	1,382	1,895
Korean Republic.....	4,883	4,717	9,600
China (Taiwan).....	1,010	3,063	4,073
Japan.....	12,117	12,112	24,229
Egypt.....	3,620	6,663	10,283
Nigeria.....	2,633	2,067	4,700
Other.....	23,738	27,971	51,709

Note: Data in this table are taken from Foreign Trade publication FT-140, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: FEBRUARY 1979

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers ¹		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	21,542	(NA)	1,275	12,539	5.9	(NA)	-	-	-	20,267	(NA)

Note: Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

S Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, **Flour Milling Products**. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

The data for 1977 and 1976 as shown in tables 1A and 1B of this report have been revised. Approximately six establishments were added to this survey in January 1978 based upon an extensive reconciliation with the 1976 Annual Survey of Manufactures (ASM). Data for 1976 and 1977 have been estimated for these plants based upon their 1976 ASM data and their 1978 M20A reports. Revised State data for 1976 and 1977 will be shown in a separate report to be issued in the next few weeks.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

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3. 158:

Flour Milling Products



U.S. Department of Commerce
BUREAU OF THE CENSUS

APRIL 1979

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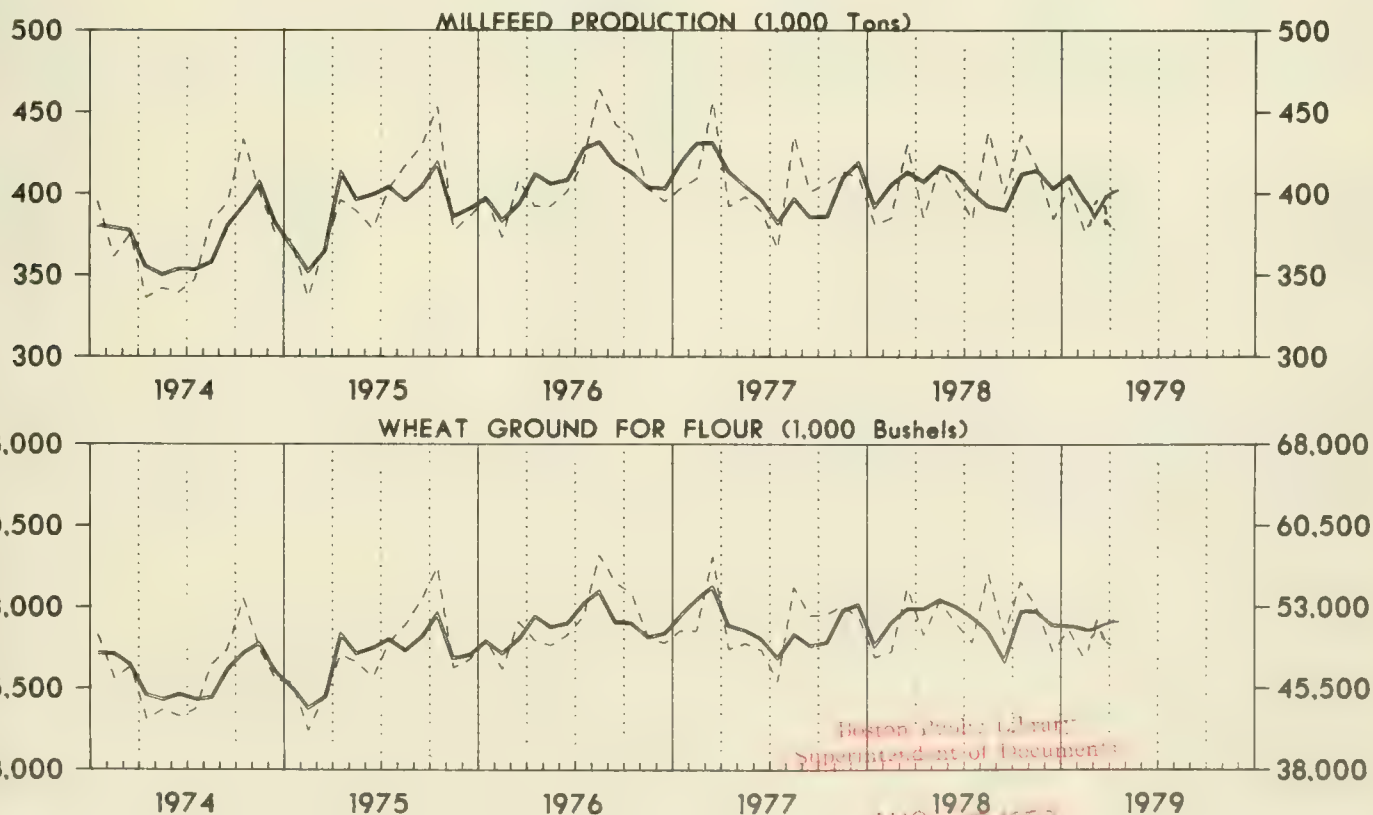
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 6.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING:
1974 TO 1979

— Seasonally Adjusted
- - - Not Seasonally Adjusted



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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1979			
April.....	1,082	408	52,531
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
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May.....	1,061	405	50,954

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25. ^rRevised.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED 1977 TO 1979

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1979								
April.....	1,059	22,248	382,273	50,034	(NA)	1,048	102.1	74.1
March.....	1,066	23,454	401,433	52,454	3,477	1,048	106.6	74.5
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April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,086	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	1,037	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2

(NA) Not available. ^r Revised

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

TABLE 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION
MILL STOCKS, AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	APRIL 1979	MARCH 1979	APRIL 1978
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	3,261	3,860	2,237
2041153	STRAIGHT SEMOLINA DURUM FLOUR.	M CWT	1,482	1,761	993
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	288	340	284
2041611	RYE FLOUR PRODUCTION.	M CWT	136	147	126
2041618	RYE MILLFEED PRODUCTION.	TONS	1,594	1,958	1,591
2041611	RYE FLOUR STOCKS (1).	M CWT	(NA)	21	(NA)
	24 HOUR CAPACITY (1).	DO	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

TABLE 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHEL; WHEAT PRODUCTION IN THOUSANDS OF HUNDREDWEIGHT)

GEOGRAPHIC AREA	APRIL 1979		MARCH 1979		APRIL 1978	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL.	50,034	22,248	52,454	23,454	50,478	22,554
MIDDLE ATLANTIC.	6,591	2,872	7,060	3,169	5,812	2,694
NEW YORK.	5,451	2,365	5,793	2,611	4,549	2,125
NORTH CENTRAL.	26,557	11,794	27,515	12,285	28,057	12,517
OHIO.	2,656	1,168	3,152	1,387	2,744	1,211
INDIANA.	1,228	528	1,300	562	1,266	569
ILLINOIS.	2,708	1,216	2,983	1,322	3,222	1,369
MICHIGAN.	818	355	935	412	902	344
MINNESOTA.	5,686	2,482	5,526	2,500	5,672	2,579
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	3,308	1,507	3,860	1,735	4,263	1,912
NEBRASKA.	(D)	(D)	(D)	(D)	(D)	(D)
KANSAS.	6,600	2,988	6,061	2,750	6,985	3,177
SOUTH ATLANTIC.	3,211	1,404	3,343	1,457	2,934	1,316
EAST SOUTH CENTRAL.	2,418	1,062	2,775	1,307	2,537	1,118
TENNESSEE.	1,885	831	2,113	1,020	2,046	905
WEST SOUTH CENTRAL.	3,732	1,685	3,454	1,552	3,637	1,542
OKLAHOMA.	1,573	725	1,352	622	1,531	710
TEXAS.	1,560	694	1,507	668	1,600	611
MOUNTAIN.	2,688	1,242	2,921	1,337	2,918	1,291
MONTANA.	592	275	682	309	627	288
UTAH.	(D)	(D)	(D)	(D)	(D)	597
PACIFIC.	4,837	2,189	5,386	2,347	4,583	2,076
WASHINGTON.	1,309	592	1,401	639	1,404	632
OREGON.	1,021	452	1,012	456	769	324
CALIFORNIA AND HAWAII.	2,507	1,145	2,973	1,252	2,410	1,120

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	March 1979	February 1978	3 months through March 1979
WHEAT FLOUR, EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010, 1314020 AND 1314030) (1,000 cwt.)			
Total.....	389	229	922
Egypt.....	107	98	286
Guatemala.....	4	3	8
Colombia.....	1	2	4
Ecuador.....	3	-	3
Brazil.....	2	-	2
Israel.....	-	-	-
India.....	10	3	19
Chile.....	53	25	89
Sri Lanka (Ceylon).....	-	-	20
Philippine Republic.....	-	-	-
Morocco.....	22	-	22
Other.....	187	98	463
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	1,077	1,105	2,482
Nicaragua.....	-	-	-
Jamaica.....	38	47	134
Brazil.....	16	-	16
Iceland.....	-	-	3
Jordan.....	-	-	-
Saudi Arabia.....	234	219	562
Sri Lanka (Ceylon).....	-	-	-
Egypt.....	619	816	1,435
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	170	23	332
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	75,546	67,105	213,051
U.S.S.R.....	13,866	10,316	28,220
Venezuela.....	2,248	38	4,197
Peru.....	-	108	103
Brazil.....	5,452	4,998	13,344
Portugal.....	1,141	2,266	3,407
Iran.....	2,420	870	6,872
Indonesia.....	1,410	513	3,305
Korean Republic.....	4,721	4,883	14,321
China (Taiwan).....	3,523	1,010	7,596
Japan.....	9,651	12,117	33,880
Egypt.....	5,610	3,620	15,893
Nigeria.....	2,598	2,633	7,298
Other.....	22,906	23,738	74,615

Note: Data in this table are taken from Foreign Trade publication FT-140, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: MARCH 1979

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
flour.....	23,454	(NA)	1,466	14,250	6.3	(NA)	-	-	-	21,988	(NA)

te: Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

Represents zero. (NA) Not available.

Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

Source: Bureau of the Census Report IM-146, Imports for Consumption.

This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, **Flour Milling Products**. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

The data for 1977 and 1976 as shown in tables 1A and 1B of this report have been revised. Approximately six establishments were added to this survey in January 1978 based upon an extensive reconciliation with the 1976 Annual Survey of Manufactures (ASM). Data for 1976 and 1977 have been estimated for these plants based upon their 1976 ASM data and their 1978 M20A reports. Revised State data for 1976 and 1977 will be shown in a separate report to be issued in the next few weeks.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no com-

comparable domestic output classification. The relationships shown in this report should be considered only as approximations. Hence, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

(a) *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c. i. f. (cost, insurance, and freight), duty, and other charges to the import point.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

(f) *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are

incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

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Foreign Trade publications	Juanita Noone	(301) 763-5140
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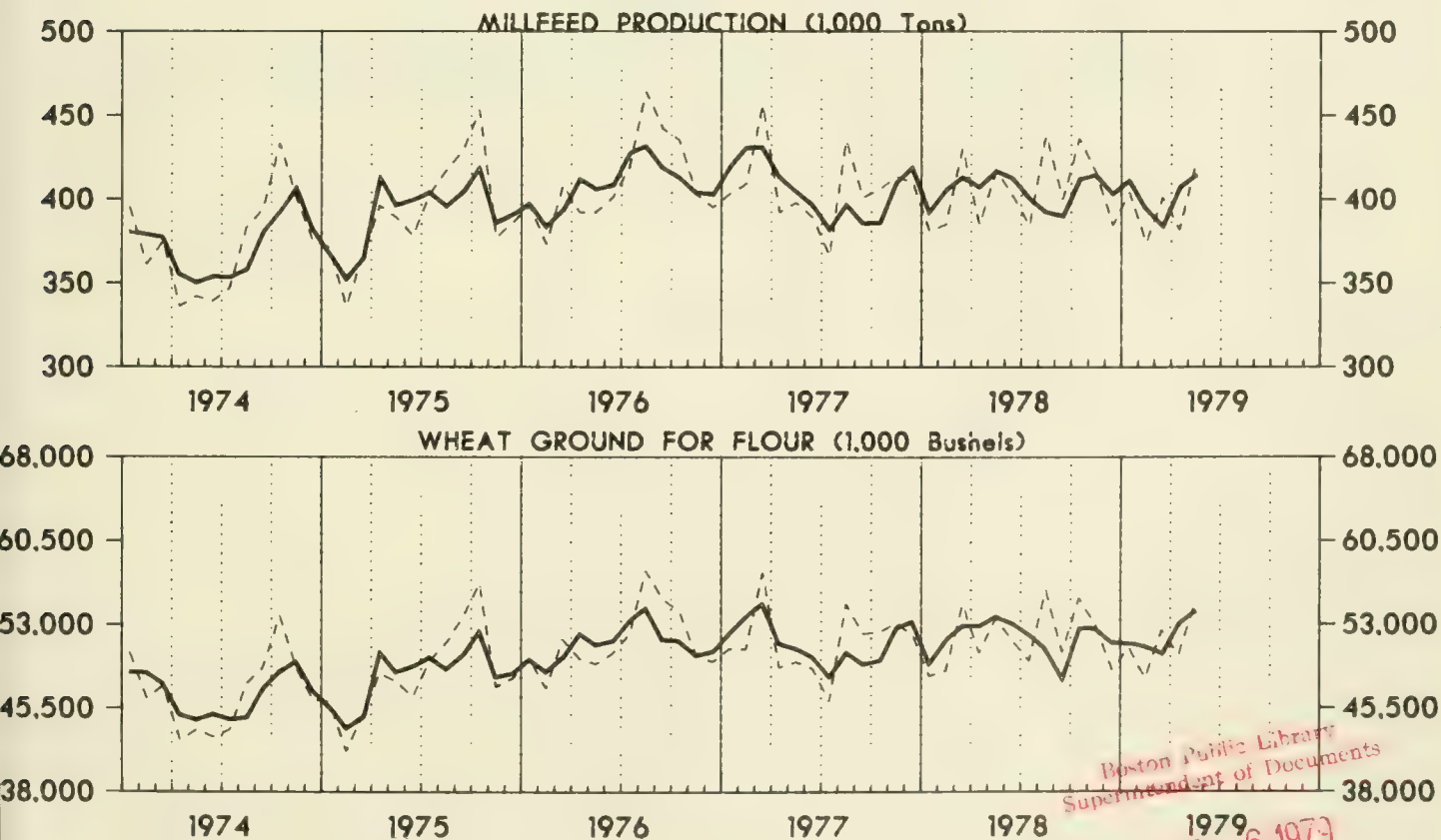
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February.....	1,086	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	1,037	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2

(NA) Not available.

¹Revised

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

TABLE 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION
MILL STOCKS, AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	MAY 1979	APRIL 1979	MAY 1978
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND	M BU	3,178	3,389	2,591
2041153	STRAIGHT SEMOLINA DURUM FLOUR	M CWT	1,424	1,532	1,127
2041155	BLENDED SEMOLINA DURUM FLOUR	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR	M BU	278	288	293
2041611	RYE FLOUR PRODUCTION	M CWT	123	136	146
2041618	RYE MILLFEED PRODUCTION	TONS	1,510	1,594	1,544
2041611	RYE FLOUR STOCKS (1)	M CWT	(NA)	(NA)	(NA)
	24 HOUR CAPACITY	DO	9	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

TABLE 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHELS; WHEAT PRODUCTION IN THOUSANDS OF HUNDREDWEIGHT)

GEOGRAPHIC AREA	MAY 1979		APRIL 1979		MAY 1978	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL.	54,886	24,565	50,205	22,291	53,601	24,078
MIDDLE ATLANTIC.	7,375	3,338	6,590	2,872	6,700	3,028
NEW YORK	5,927	2,686	5,450	2,365	5,132	2,330
NORTH CENTRAL.	28,915	12,983	26,852	11,890	29,045	13,036
OHIO	2,834	1,254	2,656	1,168	2,689	1,184
INDIANA	1,227	522	1,228	528	1,068	466
ILLINOIS	3,382	1,418	2,708	1,216	3,228	1,443
MICHIGAN	886	386	818	355	870	373
MINNESOTA	6,014	2,736	5,981	2,618	6,136	2,795
IOWA	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI	3,456	1,588	3,308	1,507	4,523	2,034
NEBRASKA	(D)	(D)	(D)	(D)	(D)	(D)
KANSAS	7,224	3,273	6,600	2,988	7,051	3,169
SOUTH ATLANTIC	3,524	1,536	3,211	1,404	3,062	1,355
EAST SOUTH CENTRAL.	2,747	1,209	2,418	1,062	2,791	1,222
TENNESSEE	2,129	940	1,885	831	2,178	957
WEST SOUTH CENTRAL.	3,845	1,721	3,705	1,671	3,827	1,677
OKLAHOMA	1,559	719	1,573	725	1,574	727
TEXAS	1,743	758	1,533	680	1,749	732
MOUNTAIN.	3,028	1,386	2,688	1,200	2,986	1,367
MONTANA	678	306	592	275	763	366
UTAH	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	5,452	2,392	4,741	2,192	5,190	2,393
WASHINGTON	1,421	643	1,309	592	1,673	755
OREGON	922	418	939	428	799	362
CALIFORNIA AND HAWAII.	3,109	1,331	2,493	1,172	2,718	1,289

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	April 1979	March 1979	4 months through April 1979
WHEAT FLOUR, EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010, 1314020 AND 1314030) (1,000 cwt.)			
Total.....	333	389	1,255
Egypt.....	120	107	406
Guatemala.....	-	4	8
Colombia.....	-	1	4
Ecuador.....	-	3	3
Brazil.....	-	2	2
Israel.....	32	-	32
India.....	-	10	19
Chile.....	11	53	100
Sri Lanka (Ceylon).....	13	-	39
Philippine Republic.....	42	-	42
Morocco.....	-	22	22
Other.....	115	187	578
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	642	1,077	3,124
Nicaragua.....	-	-	-
Jamaica.....	7	38	141
Brazil.....	16	16	32
Iceland.....	9	-	12
Jordan.....	-	-	-
Saudi Arabia.....	10	234	572
Sri Lanka (Ceylon).....	3	-	3
Egypt.....	351	619	1,786
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	246	170	578
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	76,961	75,546	290,012
U.S.S.R.....	1,645	13,866	29,865
Venezuela.....	1,836	2,248	6,033
Peru.....	-	-	103
Brazil.....	769	5,452	14,113
Portugal.....	2,315	1,141	5,722
Iran.....	1,910	2,420	8,782
Indonesia.....	3,810	1,410	7,115
Korean Republic.....	6,687	4,721	21,008
China (Taiwan).....	1,010	3,523	8,606
Japan.....	10,544	9,651	44,424
Egypt.....	5,229	5,610	21,122
Nigeria.....	2,880	2,598	10,178
Other.....	38,326	22,906	112,941

Note: Data in this table are taken from Foreign Trade publication FT-140, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: APRIL 1979

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	22,291	(NA)	975	3,228	4.4	(NA)	-	-	-	21,316	(NA)

Note: Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, **Flour Milling Products**. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no com-

comparable domestic output classification. The relationships shown in this report should be considered only as approximations, and, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

(a) *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c. i. f. (cost, insurance, and freight), duty, and other charges to the import point.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output and imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

(f) *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are

incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-5511

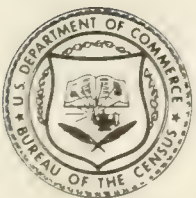
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Flour Milling Products



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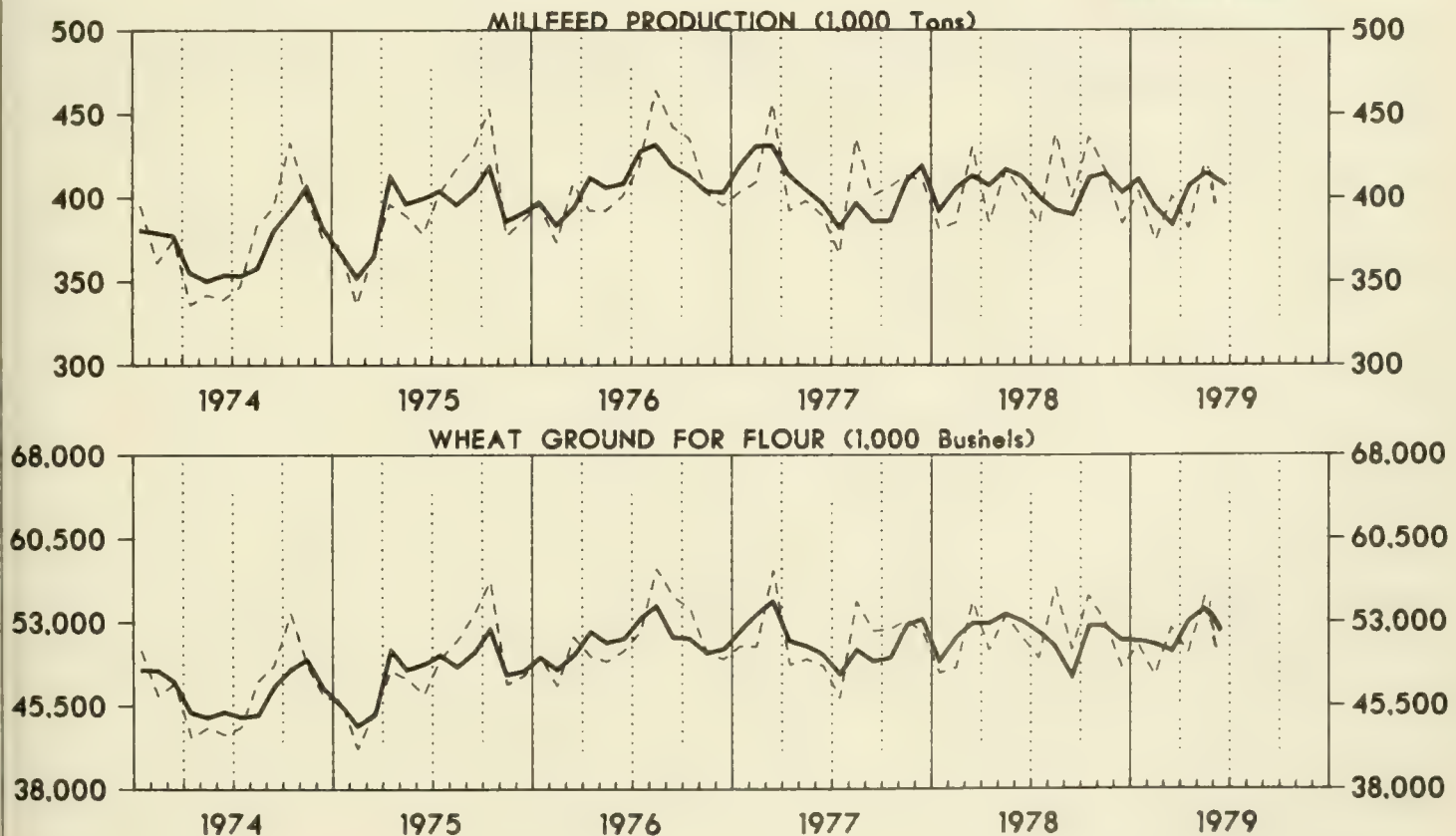
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1974 TO 1979

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED¹ 1977 TO 1979

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1979			
June.....	1,104	405	52,133
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	^r 1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788
January.....	^r 1,065	393	49,714
1977			
December.....	1,072	419	53,399
November.....	1,089	410	52,846
October.....	1,028	386	49,905
September.....	1,075	386	49,609
August.....	1,060	397	50,659
July.....	1,044	383	48,499
June.....	1,044	397	50,196

^r Revised.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED 1977 to 1979

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1979								
December.....	1,073	22,532	391,903	50,308	3,895	1,038	103.4	74.6
November.....	1,117	24,573	421,726	55,093	(NA)	1,048	106.6	74.3
October.....	1,061	22,291	382,444	50,205	(NA)	1,048	101.3	74.1
September.....	1,066	23,454	401,433	52,454	3,477	1,048	106.6	74.5
August.....	1,077	21,542	373,702	48,163	(NA)	1,049	102.7	74.5
July.....	1,037	22,817	403,584	50,886	(NA)	1,049	98.9	74.7
1978								
December.....	1,097	21,942	384,942	48,913	3,214	1,049	104.6	74.8
November.....	1,130	23,738	416,152	52,934	(NA)	1,057	106.9	74.7
October.....	1,129	24,843	436,433	55,348	(NA)	1,057	106.8	74.6
September.....	1,123	22,456	400,263	50,531	3,342	1,057	105.9	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,036	105.1	74.4
July.....	1,117	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
December.....	1,047	23,051	401,878	51,544	3,549	1,036	101.1	74.5
November.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
October.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
September.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
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November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
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September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
December.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9

(NA) Not available. ^R Revised.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	June 1979	May 1979	June 1978
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.....	2,417	3,179	2,362
20411 53	Straight semolina durum flour.....	M cwt.....	1,059	1,429	1,028
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.....	299	278	298
20416 11	Rye flour production.....	M cwt.....	129	123	137
20416 18	Rye millfeed production.....	Tons.....	1,785	1,510	1,712
20416 11	Rye flour stocks ¹	M cwt.....	50	(NA)	22
	24 hour capacity.....	..do.....	16	16	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	June 1979		May 1979		June 1978	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	50,308	22,532	55,093	24,573	51,544	23,051
Middle Atlantic.....	6,471	2,926	7,359	3,334	6,771	3,110
New York.....	5,308	2,405	5,910	2,686	5,508	2,549
North Central.....	27,222	12,227	29,104	12,983	27,584	12,352
Ohio.....	2,473	1,097	2,834	1,254	2,420	1,049
Indiana.....	1,477	618	1,227	522	1,093	477
Illinois.....	2,906	1,282	3,383	1,418	2,684	1,176
Michigan.....	772	336	886	386	917	399
Minnesota.....	5,573	2,565	6,014	2,736	5,996	2,732
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,331	1,528	3,466	1,588	4,559	2,044
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,952	3,159	7,224	3,273	6,756	3,054
South Atlantic.....	2,985	1,302	3,524	1,536	3,110	1,342
East South Central.....	2,264	993	2,747	1,209	2,649	1,168
Tennessee.....	1,745	767	2,129	940	2,103	929
West South Central.....	3,697	1,661	3,875	1,733	3,868	1,671
Oklahoma.....	1,587	733	1,559	719	1,560	717
Texas.....	1,472	646	1,773	770	1,700	688
Mountain.....	2,946	1,350	3,028	1,386	2,861	1,292
Montana.....	552	256	678	306	655	301
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,723	2,076	5,456	2,392	4,701	2,116
Washington.....	1,193	539	1,421	643	1,306	581
Oregon.....	769	347	923	418	901	346
California and Hawaii.....	2,761	1,187	3,112	1,331	2,494	1,139

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	May 1979	April 1979	5 months through May 1979
WHEAT FLOUR, EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010, 1314020 AND 1314030) (1,000 cwt.)			
Total.....	251	333	1,506
Egypt.....	10	120	416
Guatemala.....	26	-	34
Colombia.....	1	-	5
Ecuador.....	-	-	3
Brazil.....	-	-	2
Israel.....	26	32	58
India.....	16	-	35
Chile.....	-	11	100
Sri Lanka (Ceylon).....	-	13	39
Philippine Republic.....	59	42	101
Morocco.....	15	-	37
Other.....	98	115	676
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	2,632	642	5,756
Nicaragua.....	-	-	-
Jamaica.....	3	7	144
Brazil.....	-	16	22
Iceland.....	-	9	12
Jordan.....	4	-	4
Saudi Arabia.....	243	10	815
Sri Lanka (Ceylon).....	15	3	18
Egypt.....	1,673	351	3,459
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	694	246	1,272
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	76,789	76,961	366,801
U.S.S.R.....	7,266	16,451	51,937
Venezuela.....	4,011	1,836	10,044
Peru.....	889	-	992
Brazil.....	1,858	769	15,971
Portugal.....	1,350	2,315	7,072
Iran.....	5,686	1,910	14,468
Indonesia.....	-	3,810	7,115
Korean Republic.....	4,887	6,687	25,895
China (Taiwan).....	1,360	1,010	9,966
Japan.....	6,867	10,544	51,291
Egypt.....	5,581	5,229	26,703
Nigeria.....	2,052	2,880	12,230
Other.....	34,982	23,520	133,117

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 2 PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: JANUARY, FEBRUARY, APRIL, AND MAY 1979

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
MAY 1979											
Wheat flour.....	24,573	(NA)	2,883	29,271	1.2	(NA)	-	-	-	21,690	(NA)
APRIL 1979											
Wheat flour.....	22,291	(NA)	975	9,803	4.4	(NA)	-	-	-	21,316	(NA)
FEBRUARY 1979											
Wheat flour.....	21,542	(NA)	1,334	13,177	6.2	(NA)	-	-	-	20,208	(NA)
JANUARY 1979											
Wheat flour.....	22,817	(NA)	604	5,886	2.6	(NA)	-	-	-	22,213	(NA)

Note: The data as shown for exports for January, February, and April 1979 have been revised to read as shown above. Schedule B code 131-000 was inadvertently excluded from the data shown for these months and for all months of 1978. Revised 1978 data will be shown in 1978 M20A Summary report to be issued shortly.

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, **Flour Milling Products**. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

The data for 1977 and 1976 as shown in tables 1A and 1B of this report have been revised. Approximately six establishments were added to this survey in January 1978 based upon an extensive reconciliation with the 1976 Annual Survey of Manufactures (ASM). Data for 1976 and 1977 have been estimated for these plants based upon their 1976 ASM data and their 1978 M20A reports. Revised State data for 1976 and 1977 will be shown in a separate report to be issued in the next few weeks.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no com-

parable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

(a) *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c. i. f. (cost, insurance, and freight), duty, and other charges to the import point.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

(f) *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are

incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-780
Foreign Trade publications	Juanita Noone	(301) 763-510
To order a Census Bureau publication	Daisy Williams	(301) 763-740
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-550

3. 158:

Flour Milling Products



1770 A (77) 7

JULY 1979

U.S. Department of Commerce
BUREAU OF THE CENSUS

M20A(79)-7
Issued September 1979

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

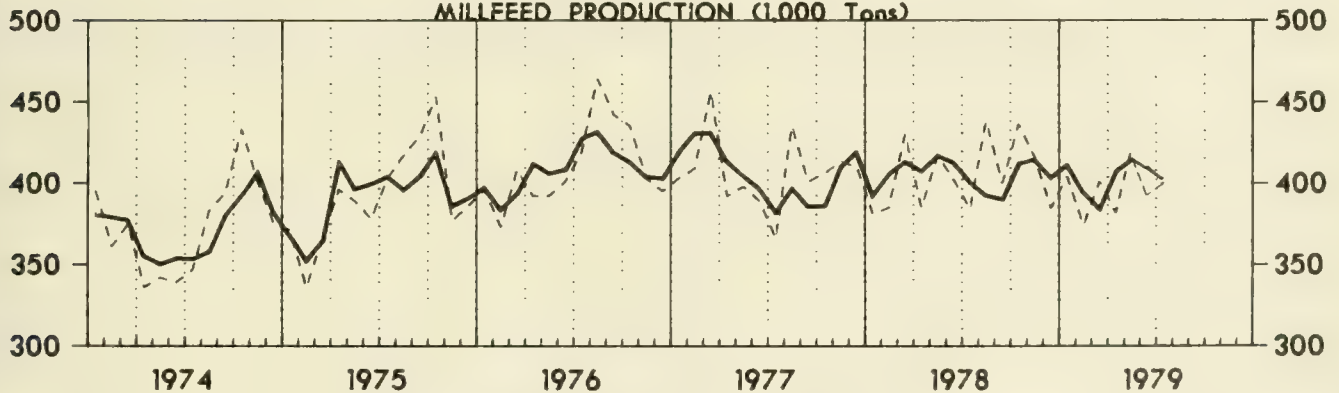
reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

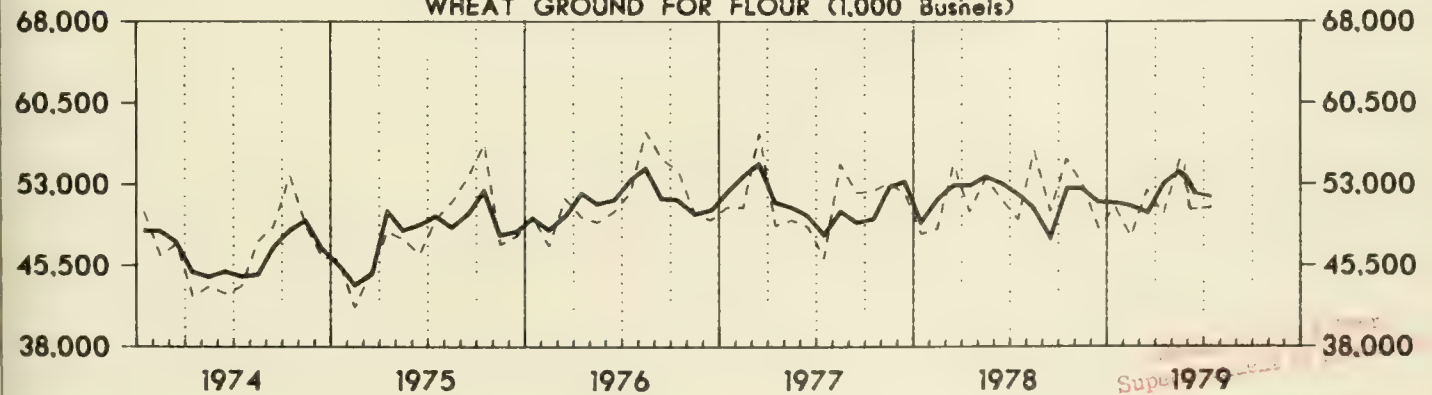
WHEAT FLOUR MILLING: 1974 TO 1979

— Seasonally Adjusted
- - - Not Seasonally Adjusted

MILLEED PRODUCTION (1,000 Tons)



WHEAT GROUND FOR FLOUR (1,000 Bushels)



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Bob Rivera, (301) 763-7807.

or sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1979			
July.....	1,140	400	51,924
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	^r 1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	^r 1,096	406	51,788
January.....	^r 1,065	393	49,714
1977			
December.....	1,072	419	53,399
November.....	1,089	410	52,846
October.....	1,028	386	49,905
September.....	1,075	386	49,609
August.....	1,060	397	50,659
July.....	1,044	383	48,499

^r Revised.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1979								
July.....	1,102	23,143	399,957	51,821	(NA)	1,050	105.0	74.4
June.....	1,073	22,536	391,196	50,138	3,895	^r 1,050	^r 102.2	74.9
May.....	1,117	24,573	421,726	55,093	(NA)	^r 1,057	^r 105.7	74.3
April.....	1,061	22,291	382,444	50,205	(NA)	^r 1,057	^r 100.4	74.1
March.....	1,066	23,454	401,433	52,454	3,477	^r 1,057	^r 100.9	74.5
February.....	1,077	21,542	373,702	48,163	(NA)	^r 1,058	^r 101.8	74.5
January.....	1,037	22,817	403,584	50,886	(NA)	^r 1,058	^r 98.0	74.7
1978								
December.....	1,097	21,942	384,942	48,913	3,214	^r 1,058	^r 103.7	74.8
November.....	1,130	23,738	416,152	52,934	(NA)	^r 1,066	^r 106.0	74.7
October.....	^r 1,129	^r 24,843	436,433	^r 55,348	(NA)	^r 1,066	^r 105.9	74.6
September.....	^r 1,123	^r 22,456	400,263	^r 50,531	3,342	^r 1,066	^r 105.3	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	^r 1,045	^r 104.2	74.4
July.....	1,117	22,335	384,090	49,749	(NA)	^r 1,045	^r 106.9	74.8
June.....	1,047	23,051	401,878	51,544	3,549	^r 1,045	^r 100.3	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	^r 1,039	^r 105.3	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	^r 1,039	^r 108.5	74.5
March.....	1,057	24,330	430,260	54,821	4,096	^r 1,039	^r 101.8	73.8
February.....	1,086	21,738	385,269	48,910	(NA)	^r 1,077	^r 100.9	74.2
January.....	1,037	21,787	380,717	48,430	(NA)	^r 1,077	^r 92.0	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	^r 1,077	^r 98.6	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3

(NA) Not available. ^rRevised.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	July 1979	June 1979	July 1978
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.....	2,263	2,417	2,225
20411 53	Straight semolina durum flour.....	M cwt.....	1,074	1,059	961
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.....	293	299	260
20416 11	Rye flour production.....	M cwt.....	130	129	114
20416 18	Rye millfeed production.....	Tons.....	1,639	1,785	1,308
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	50	(NA)
	24 hour capacity.....	..do.....	16	16	9

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	July 1979		June 1979		July 1978	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	51,821	23,143	50,138	22,536	49,749	22,335
Middle Atlantic.....	6,349	2,870	6,471	2,926	6,830	3,114
New York.....	5,180	2,350	5,308	2,405	5,585	2,593
North Central.....	28,296	12,594	27,037	12,227	26,700	12,019
Ohio.....	2,996	1,299	2,473	1,097	2,521	1,120
Indiana.....	1,466	589	1,477	618	1,222	525
Illinois.....	2,926	1,287	2,906	1,282	2,848	1,253
Michigan.....	794	342	772	336	777	324
Minnesota.....	5,830	2,634	5,573	2,565	5,326	2,434
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,437	1,559	3,331	1,528	4,817	2,152
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,936	3,134	6,869	3,127	6,090	2,728
South Atlantic.....	3,322	1,451	2,985	1,302	3,104	1,336
East South Central.....	2,670	1,155	2,264	993	2,457	1,063
Tennessee.....	2,060	896	1,745	767	1,881	815
West South Central.....	3,768	1,683	3,709	1,665	3,494	1,567
Oklahoma.....	1,625	747	1,587	733	1,423	651
Texas.....	1,562	677	1,484	650	1,475	655
Mountain.....	2,879	1,320	2,948	1,350	2,720	1,212
Montana.....	607	280	552	256	561	258
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,537	2,070	4,724	2,073	4,444	2,024
Washington.....	1,348	611	1,193	539	1,298	571
Oregon.....	706	318	769	347	863	402
California and Hawaii.....	2,483	1,141	2,762	1,187	2,283	1,051

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	June 1979	May 1979	6 months through June 1979
WHEAT FLOUR, EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	142	195	1,256
Egypt.....	-	10	370
Guatemala.....	1	26	33
Colombia.....	-	-	1
Ecuador.....	1	-	4
Brazil.....	-	-	2
Israel.....	7	26	65
India.....	12	16	47
Chile.....	3	60	103
Sri Lanka (Ceylon).....	12	-	51
Philippine Republic.....	34	-	135
Morocco.....	-	-	37
Other.....	72	57	408
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 AND 1314040) (1,000 cwt.)			
Total.....	1,731	2,690	7,869
Nicaragua.....	3	2	7
Jamaica.....	21	3	167
Brazil.....	-	-	32
Iceland.....	2	4	22
Jordan.....	20	4	25
Saudi Arabia.....	329	264	1,385
Sri Lanka (Ceylon).....	66	15	110
Egypt.....	1,213	1,673	4,720
Philippine Republic.....	-	-	2
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	77	725	1,399
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	102,197	76,789	468,998
U.S.S.R.....	19,854	7,266	71,793
Venezuela.....	1,792	4,011	11,836
Peru.....	1,160	888	2,152
Brazil.....	2,090	1,858	18,060
Portugal.....	987	1,350	8,059
Iran.....	2,281	5,686	16,745
Indonesia.....	1,968	1,856	1,189
Korean Republic.....	5,369	4,887	31,265
China (Taiwan).....	3,328	1,360	13,294
Japan.....	7,138	6,867	58,429
Egypt.....	5,395	5,581	32,100
Nigeria.....	4,266	2,052	16,500
Other.....	46,569	33,127	187,576

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: JUNE AND MAY 1979

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³	
JUNE 1979									
Wheat flour.....	23,143	(NA)	1,873	19,954	12.4	(NA)	-	-	-
MAY 1979									
Wheat flour.....	24,573	(NA)	2,883	29,271	11.7	(NA)	-	-	-

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.²Source: Bureau of the Census Report IM-146, Imports for Consumption.³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

DESCRIPTION OF SURVEY

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<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Bob Rivera	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-5511

3. 158:

Flour Milling Products



M20A (79)-8

AUGUST 1979

U.S. Department of Commerce
BUREAU OF THE CENSUS

M20A(79)-8
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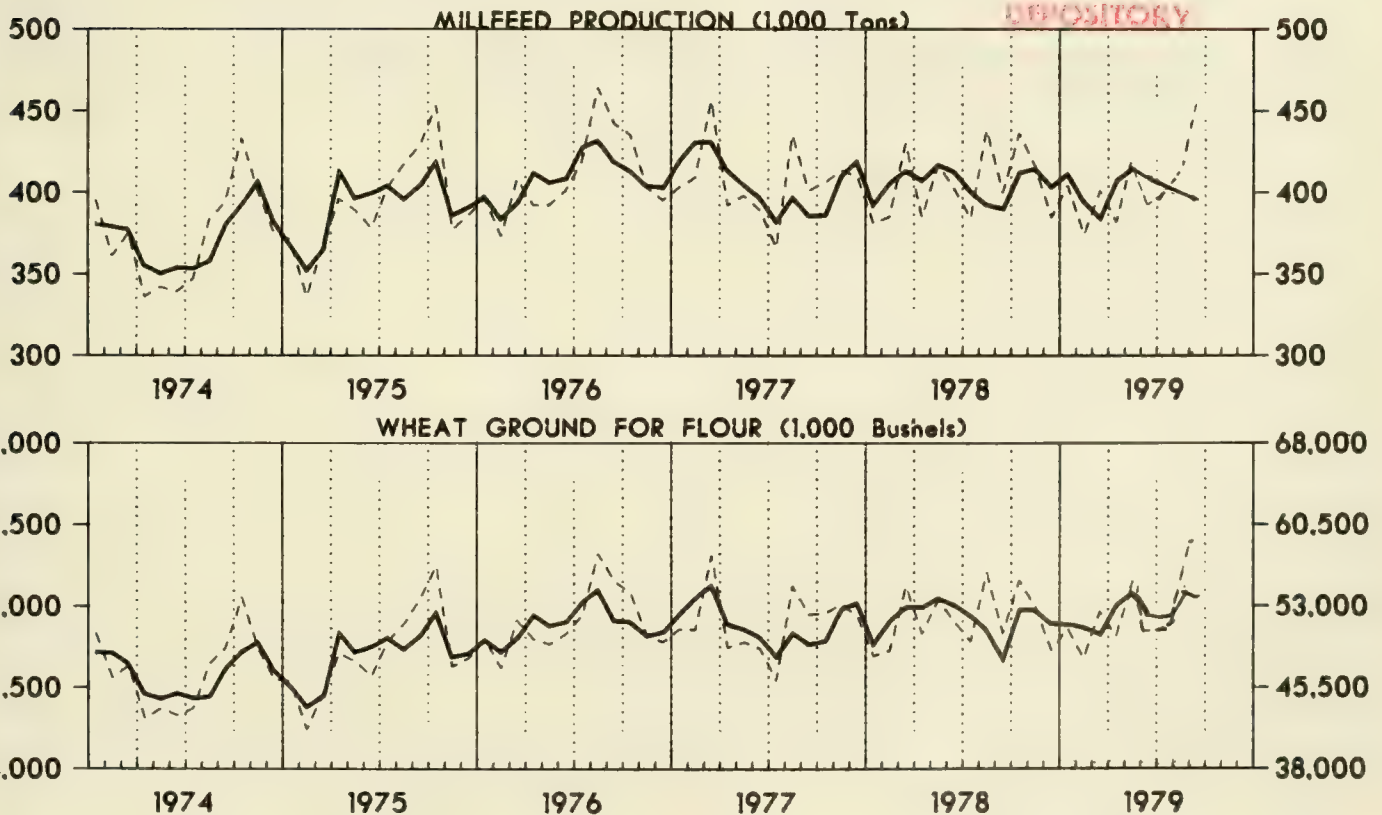
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 6.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1974 TO 1979

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Bob Rivera (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1979			
August.....	1,141	416	53,684
July.....	1,169	417	54,274
June.....	1,104	405	52,133
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788
January.....	1,065	393	49,714
1977			
December.....	1,072	419	53,399
November.....	1,089	410	52,846
October.....	1,028	386	49,905
September.....	1,075	386	49,609
August.....	1,060	397	50,659

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1979								
August.....	1,146	26,368	455,568	58,193	(NA)	1,050	109.2	74.5
July.....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June.....	1,073	22,532	391,903	50,308	3,895	1,050	102.2	74.6
May.....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April.....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March.....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February.....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January.....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December.....	1,089	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November.....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October.....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September.....	1,119	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June.....	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,039	105.3	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,039	108.5	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,039	101.8	73.8
February.....	1,089	21,783	385,269	48,910	(NA)	1,077	100.9	74.2
January.....	990	21,787	380,717	48,430	(NA)	1,077	92.0	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,077	98.6	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2

(NA) Not available. ^xRevised.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of Item	Unit of measure	August 1979	July 1979	August 1978
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	4,144	2,808	3,352
20411 55	Straight semolina durum flour.....	M cwt.....	1,872	1,252	1,487
	Blended semolina durum flour.....	Do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	306	293	282
20416 11	Rye flour production.....	M cwt.....	137	130	123
20416 18	Rye millfeed production.....	Tons.....	1,544	1,639	1,450
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity.....	Do.....	16	16	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	August 1979		July 1979		August 1978	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	58,193	26,368	51,995	23,508	56,062	25,053
Middle Atlantic.....	7,460	3,466	6,349	2,871	7,851	3,388
New York.....	5,114	2,783	5,180	2,351	6,236	2,697
North Central.....	31,410	14,185	28,491	12,670	30,344	13,542
Ohio.....	3,326	1,460	2,996	1,299	2,914	1,271
Indiana.....	1,433	609	1,466	589	1,273	546
Illinois.....	3,525	1,557	3,067	1,354	3,489	1,542
Michigan.....	950	401	796	343	937	403
Minnesota.....	6,917	3,135	5,830	2,634	6,195	2,816
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,755	1,697	3,494	1,588	5,183	2,309
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	7,402	3,319	6,936	3,115	6,611	2,980
South Atlantic.....	3,812	1,779	3,319	1,446	3,567	1,533
East South Central.....	2,895	1,265	2,670	1,156	2,651	1,159
Tennessee.....	2,226	983	2,060	897	1,981	875
West South Central.....	4,168	1,833	3,735	1,673	3,601	1,614
Oklahoma.....	1,646	761	1,625	747	1,514	698
Texas.....	1,782	789	1,529	667	1,430	627
Mountain.....	3,065	1,457	2,879	1,320	3,040	1,370
Montana.....	648	342	607	280	774	361
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,383	2,383	4,552	2,372	5,008	2,447
Washington.....	1,499	678	1,348	611	1,618	718
Oregon.....	751	338	721	329	867	425
California and Hawaii.....	3,133	1,367	2,483	1,432	2,523	1,304

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies. ¹Revised by 5 percent or more from previously published figures.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	July 1979	June 1979	7 months through July 1979
WHEAT FLOUR, EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010, AND 1314030) (1,000 cwt.)			
Total.....	156	142	1,409
Egypt.....	10	-	380
Guatemala.....	-	1	33
Colombia.....	-	-	-
Ecuador.....	-	1	7
Brazil.....	-	-	-
Israel.....	16	7	81
India.....	24	12	71
Chile.....	3	3	92
Sri Lanka (Ceylon).....	-	12	51
Philippine Republic.....	51	34	186
Morocco.....	31	-	68
Other.....	21	72	438
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040 1314020) NOT DONATED FOR RELIEF OR CHARITY (1,000 cwt.)			
Total.....	1,669	1,731	9,547
Nicaragua.....	1	3	8
Jamaica.....	46	21	214
Brazil.....	-	-	32
Iceland.....	6	2	28
Jordan.....	-	20	25
Saudi Arabia.....	262	329	1,646
Sri Lanka (Ceylon).....	452	66	562
Egypt.....	670	1,213	5,420
Philippine Republic.....	-	-	1
Korean Republic.....	-	-	-
Morocco.....	31	-	68
Other.....	201	77	1,543
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	133,283	102,197	602,281
U.S.S.R.....	17,467	19,854	89,260
Venezuela.....	2,234	1,792	14,070
Peru.....	2,788	1,160	4,940
Brazil.....	11,813	2,090	29,874
Portugal.....	2,208	987	10,267
Iran.....	1,402	2,281	18,150
Indonesia.....	-	1,968	11,892
Korean Republic.....	3,156	5,369	34,421
China (Taiwan).....	2,160	3,328	15,454
Japan.....	12,068	7,138	70,497
Egypt.....	4,840	5,395	36,937
Nigeria.....	2,936	4,266	19,431
Other.....	70,211	46,569	247,088

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: JULY 1979

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturer's shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ³ (value)
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ⁴		
Wheat flour.....	26,368	(NA)	1,825	18,847	6.9	(NA)	-	-	-	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output

20411

Exports

131.4010-131.4040

Imports

-

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M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Bob Rivera	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
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3. 158:

Flour Milling Products

SEPTEMBER 1979

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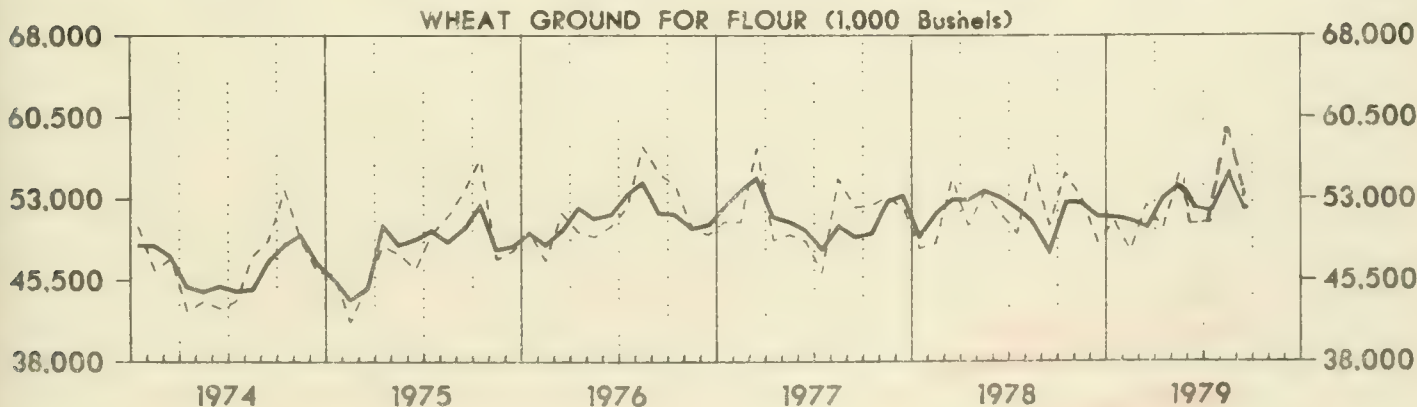
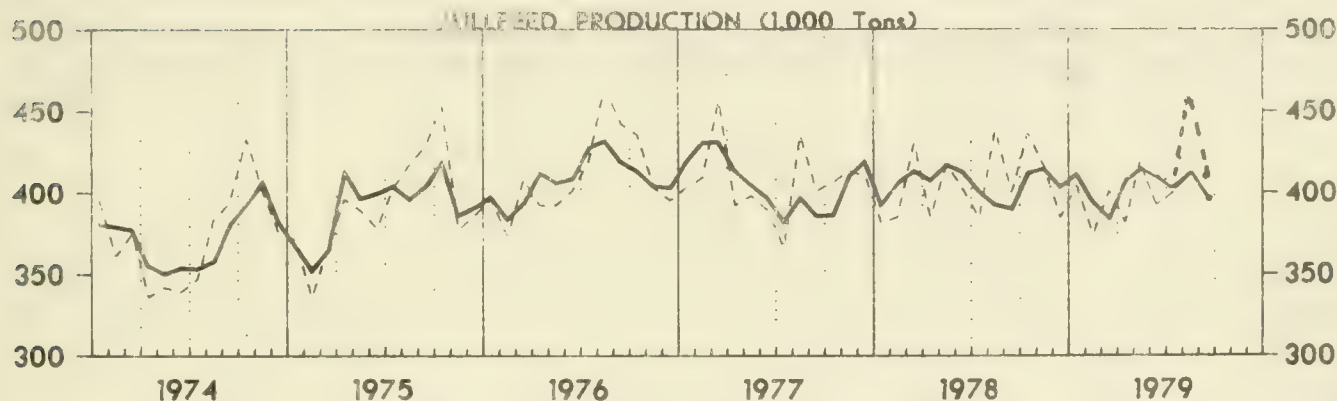
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The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1974 TO 1979



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Bob Rivera, (301) 763-7807.

For sale to the public by the Bureau of the Census, Washington, D.C. 20233. Price 25 cents per copy, \$3.30 per year. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or a draft on a U.S. bank.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED 1977 TO 1979

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1979			
September.....	1,105	399	50,291
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	^r 1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788
January.....	^r 1,080	393	49,714
1977			
December.....	1,072	419	53,399
November.....	1,089	410	52,846
October.....	1,028	386	49,905
September.....	1,075	386	49,609

^r Revised.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1979								
September.....	1,221	23,205	403,930	52,001	3,813	1,041	117.3	74.4
August.....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July.....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June.....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May.....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.7
April.....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March.....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February.....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January.....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December.....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November.....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October.....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September.....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July.....	1,117	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June.....	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,039	105.3	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,039	108.5	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,039	101.8	73.8
February.....	1,086	21,783	385,269	48,910	(NA)	1,077	100.9	74.2
January.....	1,037	21,787	380,717	48,430	(NA)	1,077	92.0	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,077	98.6	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.5

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product	Description	Unit of measure	September 1979	August 1979	September 1978
00111 73	Wheat (excluded in table)				
00111 53	Durum wheat ground.....	M cwt.....	3,418	4,144	3,278
00111 53	Straight semolina durum flour.....	M cwt.....	1,502	1,872	1,468
00111 53	Blended semolina durum flour.....	M cwt.....	(D)	(D)	(D)
00119 51	Rye ground for flour.....	M cwt.....	314	306	290
20416 11	Rye flour production.....	M cwt.....	138	137	129
20416 18	Rye millfeed production.....	Tons.....	1,727	1,544	1,739
20416 11	Rye flour stocks ¹	M cwt.....	50	(NA)	18
	Hour capacity.....	Hour.....	11	11	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available. ^F Revised by 5 percent or more from previously published figures.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	September 1979		August 1979		September 1978	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	52,001	23,205	58,874	26,334	50,531	22,456
Middle Atlantic.....	7,090	3,198	7,657	3,466	7,247	3,271
New York.....	5,746	2,602	6,114	2,783	5,942	2,700
North Central.....	27,984	12,474	31,953	14,259	27,102	12,081
Ohio.....	3,064	1,349	3,327	1,460	2,759	1,183
Indiana.....	1,396	597	1,433	609	1,312	565
Illinois.....	3,162	1,408	3,623	^F 1,606	3,140	1,393
Michigan.....	828	353	950	401	914	390
Minnesota.....	6,079	2,750	6,917	3,160	5,584	2,543
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,358	1,515	3,755	1,697	4,314	1,929
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,254	2,819	7,354	3,319	6,079	2,731
South Atlantic.....	3,092	1,351	3,843	1,669	3,130	1,141
East South Central.....	2,564	1,112	2,895	1,265	2,439	1,062
Tennessee.....	1,980	869	2,226	983	1,828	801
West South Central.....	3,255	1,463	4,078	1,835	3,269	1,474
Oklahoma.....	1,213	560	1,646	761	1,416	653
Texas.....	1,497	665	1,793	791	1,277	565
Mountain.....	3,661	1,678	3,065	1,457	2,925	1,322
Montana.....	643	298	648	342	737	344
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,355	1,929	5,383	2,383	4,419	2,105
Washington.....	1,276	575	1,499	678	1,297	573
Oregon.....	685	309	751	338	762	348
California and Hawaii.....	2,394	1,045	3,133	1,367	2,360	1,184

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

^F Revised by 5 percent or more from previously published figures.

TABLE 1. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	August 1979	July 1979	8 months through August 1979
WHEAT FLOUR, FINEST MILL AND GROUT, FOR SEFT OR CHARITY (1314011 AND 1314030) (1,000 cwt.)			
Total.....	303	156	1,712
Egypt.....	-	10	380
Guatemala.....	-	-	33
Colombia.....	-	-	-
Ecuador.....	-	-	-
Brazil.....	-	-	2
Israel.....	3	16	84
India.....	36	14	107
Chile.....	-	3	92
Sri Lanka (Ceylon).....	55	-	106
Philippine Republic.....	77	51	263
Morocco.....	74	31	142
Other.....	58	21	496
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 AND 1314040) (1,000 cwt.)			
Total.....	2,489	1,669	12,036
Nicaragua.....	2	1	10
Jamaica.....	41	46	260
Brazil.....	-	-	32
Iceland.....	3	6	31
Jordan.....	3	-	28
Saudi Arabia.....	212	262	1,858
Sri Lanka (Ceylon).....	859	452	1,421
Egypt.....	1,076	670	6,496
Philippine Republic.....	-	-	1
Korean Republic.....	-	-	-
Morocco.....	-	31	68
Other.....	293	201	1,831
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	117,787	133,283	720,068
U.S.S.R.....	20,207	17,467	109,467
Venezuela.....	1,338	2,234	15,408
Peru.....	1,910	2,788	6,850
Brazil.....	6,065	11,813	35,939
Portugal.....	2,260	2,208	12,527
Iran.....	1,943	1,402	20,094
Indonesia.....	2,039	-	13,932
Korean Republic.....	11,443	3,156	45,864
China (Taiwan).....	827	2,160	16,280
Japan.....	10,583	12,068	81,080
Egypt.....	-	4,840	36,937
Nigeria.....	2,973	2,936	22,405
Other.....	56,199	70,211	303,285

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: AUGUST AND JULY 1979

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³	
AUGUST 1979									
wheat flour.....	23,205	(NA)	2,792	23,546	12.0	(NA)	-	-	
JULY 1979									
wheat flour.....	26,368	(NA)	1,825	18,847	6.9	(NA)	-	-	

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.²Source: Bureau of the Census Report IM-146, Imports for Consumption.³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour-mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the

Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. **Valuation**—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c. i. f. (cost, insurance, and freight), duty, and other charges to the import point.

b. Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

d. Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. "Direct" vs "Total" Commodity Export and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-35	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Bob Rivera	(301) 763-780
Foreign Trade publications	Juanita Noone	(301) 763-514
To order a Census Bureau publication	Daisy Williams	(301) 763-747
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-551

Flour Milling Products



U.S. Department of Commerce
BUREAU OF THE CENSUS

OCTOBER 1979

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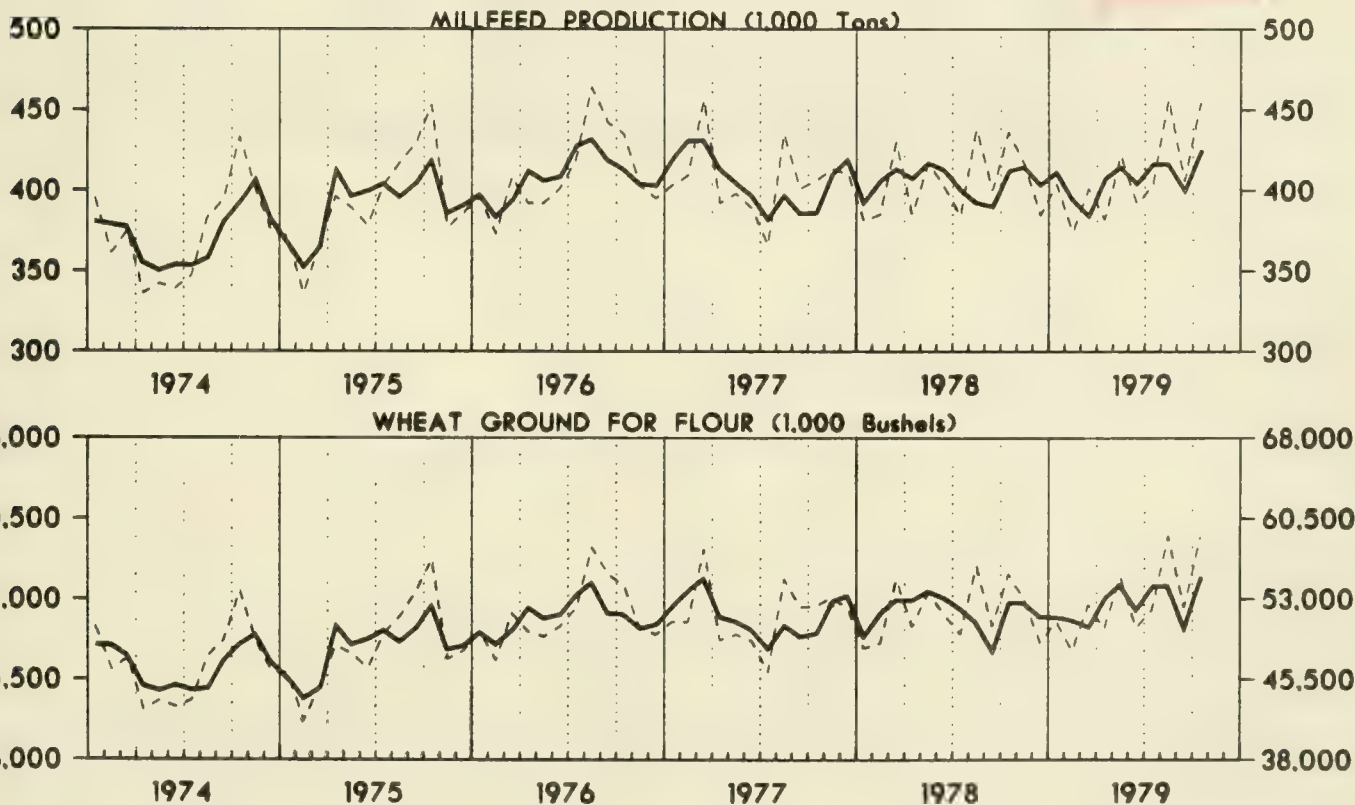
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WHEAT FLOUR MILLING: 1974 TO 1979

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Job Rivers (301) 763-7807. For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED- 1977 TO 1979

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1979			
October.....	1,158	429	55,133
September.....	1,109	402	50,540
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,104	405	52,133
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
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November.....	1,089	410	52,846
October.....	1,028	386	49,905
September.....	1,075	386	49,609
August.....	1,060	397	50,659

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1979								
October (22 days).....	1,188	26,139	458,838	58,827	(NA)	1,050	113.2	74.1
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July.....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
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December.....	1,089	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November.....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October.....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September.....	1,119	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June.....	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,039	105.3	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,039	108.5	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,039	101.8	73.8
February.....	1,089	21,783	385,269	48,910	(NA)	1,077	100.9	74.2
January.....	990	21,787	380,717	48,430	(NA)	1,077	92.0	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,077	98.6	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2

(NA) Not available. ^rRevised.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	October 1979	September 1979	October 1978
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.....	3,392	3,418	4,512
20411 53	Straight semolina durum flour.....	M cwt.....	1,475	1,502	1,726
20411 55	Blended semolina durum flour.....	Do.....	(D)	(D)	(D)
	Rye:				
30119 51	Rye ground for flour.....	M bu.....	332	303	340
20416 11	Rye flour production.....	M cwt.....	149	131	149
20416 18	Rye millfeed production.....	Tons.....	1,613	1,642	1,909
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	50	(NA)
	24 hour capacity.....	Do.....	11	11	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available. ^r Revised by 5 percent or more from previously published figures.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	October 1979		September 1979		October 1978	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	58,827	26,139	52,258	23,280	55,348	24,841
Middle Atlantic.....	7,940	3,543	7,117	3,205	7,574	3,461
New York.....	6,397	2,878	5,745	2,601	6,141	2,827
North Central.....	31,512	14,046	28,195	12,525	30,221	13,520
Ohio.....	3,506	1,543	3,064	1,349	3,401	1,425
Indiana.....	1,540	663	1,396	597	1,434	608
Illinois.....	3,583	1,589	3,162	1,408	3,500	1,538
Michigan.....	986	438	831	354	966	428
Minnesota.....	7,004	3,166	6,210	2,777	6,128	2,798
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,812	1,720	3,358	1,515	2,302	1,089
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,890	3,114	6,302	2,842	6,454	2,919
South Atlantic.....	3,979	1,742	3,083	1,341	3,306	1,431
East South Central.....	2,882	1,267	2,564	1,122	2,558	1,121
Tennessee.....	2,250	994	1,980	869	1,968	868
West South Central.....	3,638	1,642	3,283	1,480	3,199	1,436
Oklahoma.....	1,407	651	1,213	560	1,244	573
Texas.....	1,642	728	1,525	682	1,386	611
Mountain.....	3,170	1,458	3,661	1,678	3,171	1,441
Montana.....	759	353	643	298	770	358
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,706	2,441	4,355	1,929	5,314	2,333
Washington.....	1,694	764	1,276	575	1,572	699
Oregon.....	734	330	685	309	818	382
California and Hawaii.....	3,278	1,347	2,394	1,045	2,929	1,352

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	September 1979	August 1979	9 months through September 1979
WHEAT FLOUR, EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010, AND 1314030) (1,000 cwt.)			
Total.....	119	303	1,831
Egypt.....	-	-	380
Guatemala.....	8	-	41
Colombia.....	-	-	-
Ecuador.....	-	-	-
Brazil.....	-	-	2
Israel.....	4	3	89
India.....	-	36	107
Chile.....	-	-	106
Sri Lanka (Ceylon).....	-	55	17
Philippine Republic.....	5	77	268
Morocco.....	52	74	193
Other.....	50	58	34
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040 1314020) NOT DONATED FOR RELIEF OR CHARITY (1,000 cwt.)			
Total.....	2,218	2,489	14,254
Nicaragua.....	1	2	11
Jamaica.....	37	41	291
Brazil.....	-	-	32
Iceland.....	1	3	37
Jordan.....	-	3	27
Saudi Arabia.....	418	212	2,276
Sri Lanka (Ceylon).....	260	859	1,681
Egypt.....	1,179	1,076	7,674
Philippine Republic.....	-	-	1
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	322	293	2,224
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	129,617	117,787	849,685
U.S.S.R.....	22,035	20,207	131,502
Venezuela.....	4,084	1,338	19,492
Peru.....	3,777	1,910	10,627
Brazil.....	8,864	6,065	44,803
Portugal.....	3,746	2,260	16,273
Iran.....	2,352	1,943	22,445
Indonesia.....	1,883	2,039	15,815
Korean Republic.....	1,975	11,443	47,839
China (Taiwan).....	3,518	827	19,799
Japan.....	12,513	10,581	93,593
Egypt.....	-	-	36,937
Nigeria.....	2,144	2,973	24,549
Other.....	62,726	56,199	366,011

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: SEPTEMBER 1979

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturer's shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
Wheat flour.....	23,258	(NA)	2,337	27,925	10.1	-	-	-	-

Comparison of Standard Industrial Classification codes, Schedule B export number, and U.S.A. port numbers as a guide to the data.

Domestic output

Exports

20411

111.001-111.004

-Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report IV-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IV-140, Imports for Consumption.

³This dollar value represents the c.i.f. cost of imports and includes the cost of the duty on the imports. It does not include the cost of the duty on the imports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, **Flour Milling Products**. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no com-

parable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c. i. f. (cost, insurance, and freight), duty, and other charges to the import point.

b. *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

d. *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are

incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Bob Rivera	(301) 763-2553
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
To order Census Bureau microfiche	Maria Brown	(301) 763-5511

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Flour Milling Products



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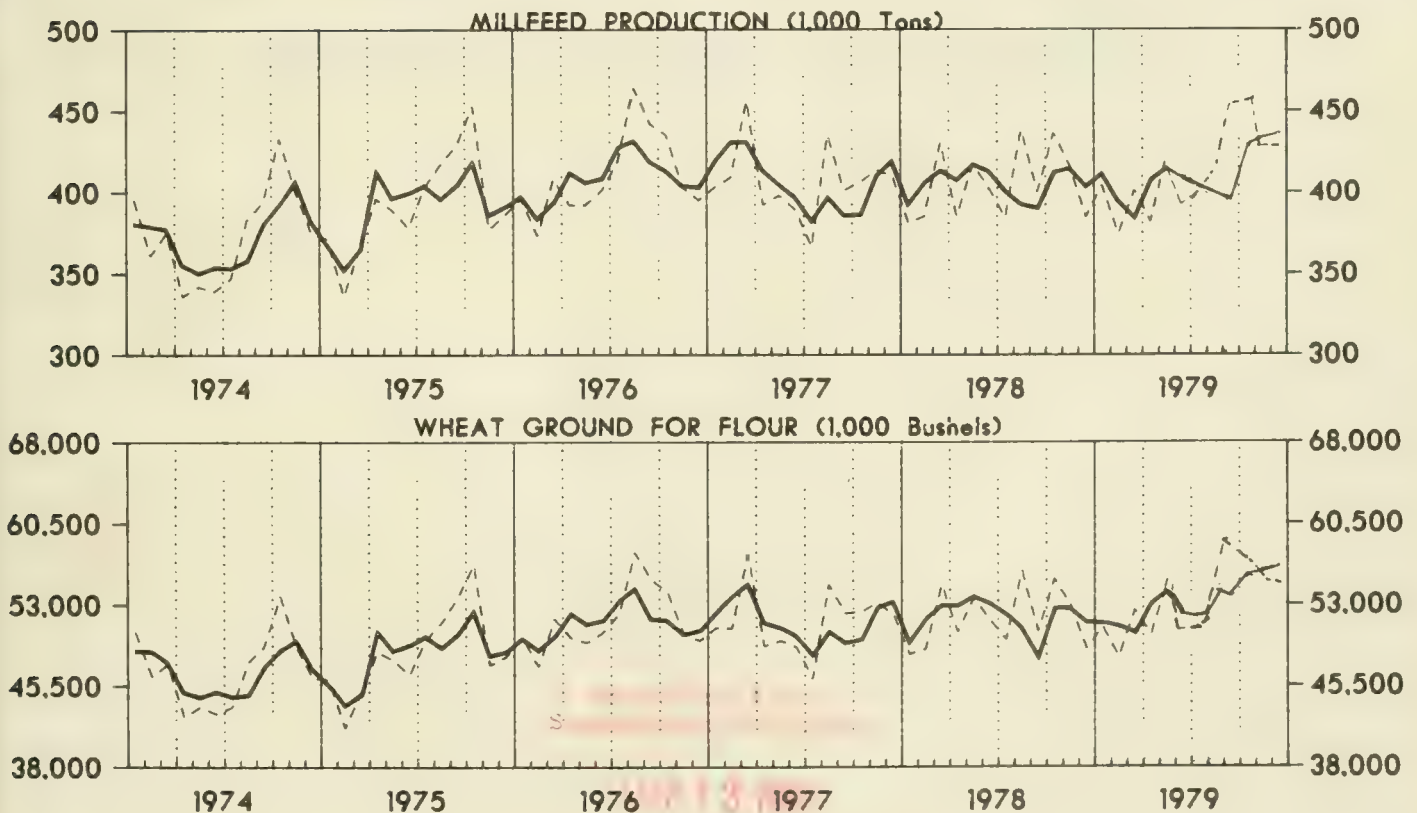
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1974 TO 1979

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Bob Rivera, (301) 763-2553.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1979			
November.....	1,163	439	55,887
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	^r 1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788
January.....	^r 1,065	393	49,714
1977			
December.....	1,072	419	53,399
November.....	1,089	410	52,846

^r Revised.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1979								
November.....	1,180	24,782	435,862	55,552	(NA)	1,050	112.4	74.4
October.....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.1
September.....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August.....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July.....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June.....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May.....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April.....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March.....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February.....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January.....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December.....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November.....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October.....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September.....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July.....	1,117	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June.....	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,039	105.3	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,039	108.5	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,039	101.8	73.8
February.....	1,086	21,783	385,269	48,910	(NA)	1,077	100.9	74.2
January.....	1,037	21,787	380,717	48,430	(NA)	1,077	92.0	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,077	98.6	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	November 1979	October 1979	November 1978
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	3,132	3,435	3,619
20411 55	Straight semolina durum flour.....	M cwt.....	1,385	1,500	1,608
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	284	332	366
20416 11	Rye flour production.....	M cwt.....	129	149	159
20416 18	Rye millfeed production.....	Tons.....	1,374	1,613	2,183
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity.....	..do.....	11	11	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	November 1979		October 1979		November 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	55,552	24,782	58,772	26,137	52,934	23,738
Middle Atlantic.....	7,586	3,337	7,902	3,549	7,472	3,367
New York.....	5,867	2,572	6,397	2,878	5,932	2,678
North Central.....	29,141	13,054	31,506	14,044	27,966	12,560
Ohio.....	3,208	1,411	3,506	1,543	2,878	1,269
Indiana.....	1,097	476	1,540	663	1,331	572
Illinois.....	3,335	1,472	3,583	1,589	3,050	1,347
Michigan.....	887	396	980	436	867	383
Minnesota.....	6,484	2,930	7,004	3,166	6,180	2,813
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,571	1,623	3,812	1,720	4,599	2,073
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,705	3,014	6,890	3,114	5,797	2,640
South Atlantic.....	4,022	1,775	3,979	1,742	3,525	1,542
East South Central.....	2,610	1,144	2,882	1,267	2,408	1,054
Tennessee.....	2,005	880	2,250	994	1,852	817
West South Central.....	3,983	1,796	3,638	1,642	3,404	1,521
Oklahoma.....	1,618	751	1,407	651	1,241	569
Texas.....	1,742	767	1,642	728	1,609	708
Mountain.....	3,054	1,412	3,170	1,458	3,051	1,390
Montana.....	795	373	759	353	826	382
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,156	2,264	5,695	2,435	5,108	2,304
Washington.....	1,568	707	1,694	764	1,475	661
Oregon.....	673	300	737	326	771	351
California and Hawaii.....	2,915	1,257	3,264	1,345	2,862	1,292

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	October 1979	September 1979	10 months through October 1979
WHEAT FLOUR, EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	160	119	1,992
Egypt.....	-	-	380
Guatemala.....	-	8	41
Colombia.....	-	-	-
Ecuador.....	-	-	4
Brazil.....	-	-	2
Israel.....	28	4	117
India.....	18	-	125
Chile.....	15	-	122
Sri Lanka (Ceylon).....	-	-	107
Philippine Republic.....	1	5	269
Morocco.....	43	52	237
Other.....	55	50	588
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 AND 1314040) (1,000 cwt.)			
Total.....	1,223	2,218	15,478
Nicaragua.....	1	1	12
Jamaica.....	30	37	321
Brazil.....	6	-	38
Iceland.....	5	1	18
Jordan.....	-	-	27
Saudi Arabia.....	524	418	2,800
Sri Lanka (Ceylon).....	-	260	1,682
Egypt.....	289	1,179	7,964
Philippine Republic.....	-	-	1
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	368	322	2,615
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	149,040	129,617	998,726
U.S.S.R.....	28,251	22,035	159,753
Venezuela.....	1,799	4,084	21,291
Peru.....	1,885	3,777	12,512
Brazil.....	3,832	8,864	48,635
Portugal.....	1,289	3,746	17,562
Iran.....	-	2,352	22,445
Indonesia.....	2,822	1,883	18,637
Korean Republic.....	4,560	1,975	52,399
China (Taiwan).....	3,256	3,518	23,055
Japan.....	9,460	12,513	103,053
Egypt.....	1,830	-	38,768
Nigeria.....	3,073	2,144	27,622
Other.....	86,983	62,726	452,994

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: OCTOBER 1979

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments	
	Quantity	Value	Quantity	Value	Quantity	Value
OCTOBER 1979						
Wheat flour.....	26,137	(NA)	1,383	16,755	5.3	(NA)
SEPTEMBER 1979						
Wheat flour.....	23,280	(NA)	2,337	27,925	10.0	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	-

NA Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

Table 6. PRODUCTION, EXPORTS, AND IMPORTS OF WHEAT FLOUR: 1978

(Quantity in 1,000 cwt.; value in \$1,000)

Product code	Item	Quantity produced	Exports of domestic merchandise ^{1 2}		Percent exports to manufacturers' production
			Quantity	Value	
20411 --	Wheat flour.....	277,950	20,102	177,439	7.2

Note: Revision to data as published in table 7 of the M20A summary for 1978. Comparison of domestic production and export codes is as follows:

<u>Domestic output</u>	<u>Exports</u>
20411 -- Wheat flour	1,314,010

¹The data as shown for exports have been revised to include Schedule B code 131.4020 which was previously excluded in error.²Source: Bureau of the Census Report FT-410, U.S. Exports of Domestic Merchandise; SIC-Based Products and Area.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour-mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the

Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c. i. f. (cost, insurance, and freight), duty, and other charges to the import point.

b. Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

d. Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. "Direct" vs "Total" Commodity Export and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Bob Rivera	(301) 763-2551
Foreign Trade publications	Juanita Noone	(301) 763-5141
To order a Census Bureau publication	Daisy Williams	(301) 763-7471
To order Census Bureau microfiche	Maria Brown	(301) 763-5511

3. 158:

Flour Milling Products



M 20 A (79)-12

U.S. Department of Commerce
BUREAU OF THE CENSUS

DECEMBER 1979

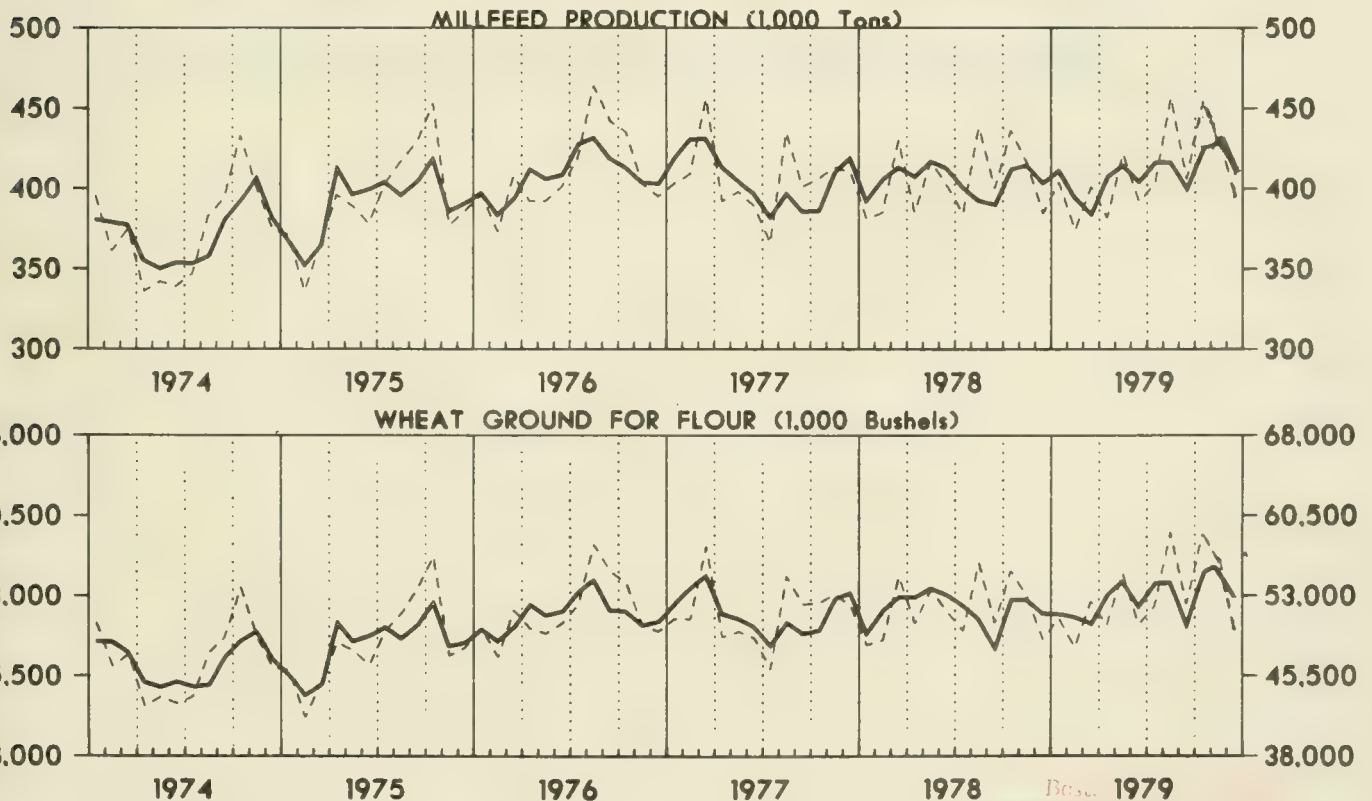
M20A(79)-12
Issued February 1980

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1974 TO 1979



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Job Rivera, (301) 763-5895.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1979			
December.....	1,114	416	53,018
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788
January.....	1,065	393	49,714
1977			
December.....	1,072	419	53,399
November.....	1,089	410	52,846

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1977 TO 1979

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1979								
December (20 days).....	1,135	22,695	396,015	50,420	3,975	1,053	98.0	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.1
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days).....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September (20 days).....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August (23 days).....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July (20 days).....	1,117	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June (22 days).....	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5
May (22 days).....	1,094	24,078	417,032	53,601	(NA)	1,039	105.3	74.5
April (20 days).....	1,127	22,554	385,227	50,478	(NA)	1,039	108.5	74.5
March (23 days).....	1,057	24,330	430,260	54,821	4,096	1,039	101.8	73.8
February (20 days).....	1,086	21,783	385,269	48,910	(NA)	1,077	100.9	74.2
January (21 days).....	1,037	21,787	380,717	48,430	(NA)	1,077	92.0	74.9
1977								
December (22 days).....	1,062	23,363	410,169	52,106	4,160	1,077	98.6	74.7

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	December 1979	November 1979	December 1978
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,990	3,132	3,262
20411 55	Straight semolina durum flour.....	M cwt.....	1,294	1,385	1,452
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	267	284	349
20416 11	Rye flour production.....	M cwt.....	120	129	151
20416 18	Rye millfeed production.....	Tons.....	1,115	1,374	1,975
20416 11	Rye flour stocks ¹	M cwt.....	18	(NA)	23
	24 hour capacity.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	December 1979		November 1979		December 1978	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	50,420	22,695	55,586	24,778	48,913	21,94
Middle Atlantic.....	7,046	3,221	7,586	3,337	7,204	3,22
New York.....	5,626	2,581	5,867	2,572	5,862	2,64
North Central.....	26,571	11,932	29,138	13,049	25,265	11,32
Ohio.....	2,726	1,203	3,205	1,406	2,674	1,17
Indiana.....	1,259	545	1,097	476	1,314	56
Illinois.....	2,822	1,252	3,335	1,472	2,673	1,19
Michigan.....	714	313	887	396	722	31
Minnesota.....	5,947	2,696	6,484	2,930	5,718	2,59
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,318	1,510	3,571	1,623	3,900	1,76
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,458	2,926	6,705	3,014	5,436	2,47
South Atlantic.....	3,351	1,468	4,028	1,763	3,201	1,40
East South Central.....	2,447	1,074	2,610	1,144	2,415	1,05
Tennessee.....	1,837	811	2,005	880	1,846	81
West South Central.....	3,643	1,642	4,014	1,809	3,368	1,44
Oklahoma.....	1,476	685	1,618	751	1,258	57
Texas.....	1,601	706	1,773	780	1,378	61
Mountain.....	2,720	1,256	3,054	1,412	2,797	1,24
Montana.....	674	315	795	373	721	32
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,642	2,102	5,156	2,264	4,663	2,134
Washington.....	1,378	624	1,568	707	1,303	59
Oregon.....	641	293	673	300	738	33
California and Hawaii.....	2,623	1,185	2,915	1,257	2,622	1,300

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	November 1979	October 1979	11 months through November 1979
WHEAT FLOUR, EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	284	160	2,275
Egypt.....	37	-	417
Guatemala.....	-	-	41
Colombia.....	-	-	-
Ecuador.....	-	-	4
Brazil.....	-	-	2
Israel.....	6	28	123
India.....	18	18	143
Chile.....	4	15	125
Sri Lanka (Ceylon).....	34	-	141
Philippine Republic.....	33	1	302
Morocco.....	60	43	297
Other.....	92	55	680
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 AND 1314040) (1,000 cwt.)			
Total.....	843	1,223	16,320
Nicaragua.....	-	1	12
Jamaica.....	19	30	23
Brazil.....	-	6	38
Iceland.....	1	5	44
Jordan.....	-	-	28
Saudi Arabia.....	464	524	3,263
Sri Lanka (Ceylon).....	-	-	1,681
Egypt.....	242	289	8,205
Philippine Republic.....	26	-	27
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	91	368	2,999
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	108,882	149,040	1,107,607
U.S.S.R.....	12,851	28,251	172,603
Venezuela.....	2,656	1,799	23,947
Peru.....	1,993	1,885	14,505
Brazil.....	3,807	3,832	52,442
Portugal.....	-	1,289	17,562
Iran.....	-	-	22,445
Indonesia.....	1,519	2,822	20,156
Korean Republic.....	5,658	4,560	5,806
China (Taiwan).....	2,204	3,256	25,259
Japan.....	9,018	9,460	112,071
Egypt.....	3,881	1,830	42,649
Nigeria.....	3,389	3,073	31,011
Other.....	61,906	86,983	567,151

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: OCTOBER 1979

(Quantity in 1,000 cwt., value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments	
	Quantity	Value	Quantity	Value	Quantity	Value
NOVEMBER 1979						
Wheat flour.....	22,695	(NA)	1,027	13,485	4.5	(NA)
OCTOBER 1979						
Wheat flour.....	24,778	(NA)	1,383	16,755	5.6	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	-

NA Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

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Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

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RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Bob Rivera	(301) 763-5895
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
To order Census Bureau microfiche	Maria Brown	(301) 763-5511

3. 158:

Flour Milling Products



M 20 A (79) -13

U.S. Department of Commerce
BUREAU OF THE CENSUS

SUMMARY FOR 1979

M20A(79)-13
Issued September 1980

SUMMARY OF FINDINGS

Total commercial production of wheat flour in 1979 amounted to 284 million cwt. sacks, about 6.1 million cwt. sacks above the 1978 production. Production figures in 1979 and 1978 were at 105.2 and 103.3 percent, respectively, of total annual capacity.

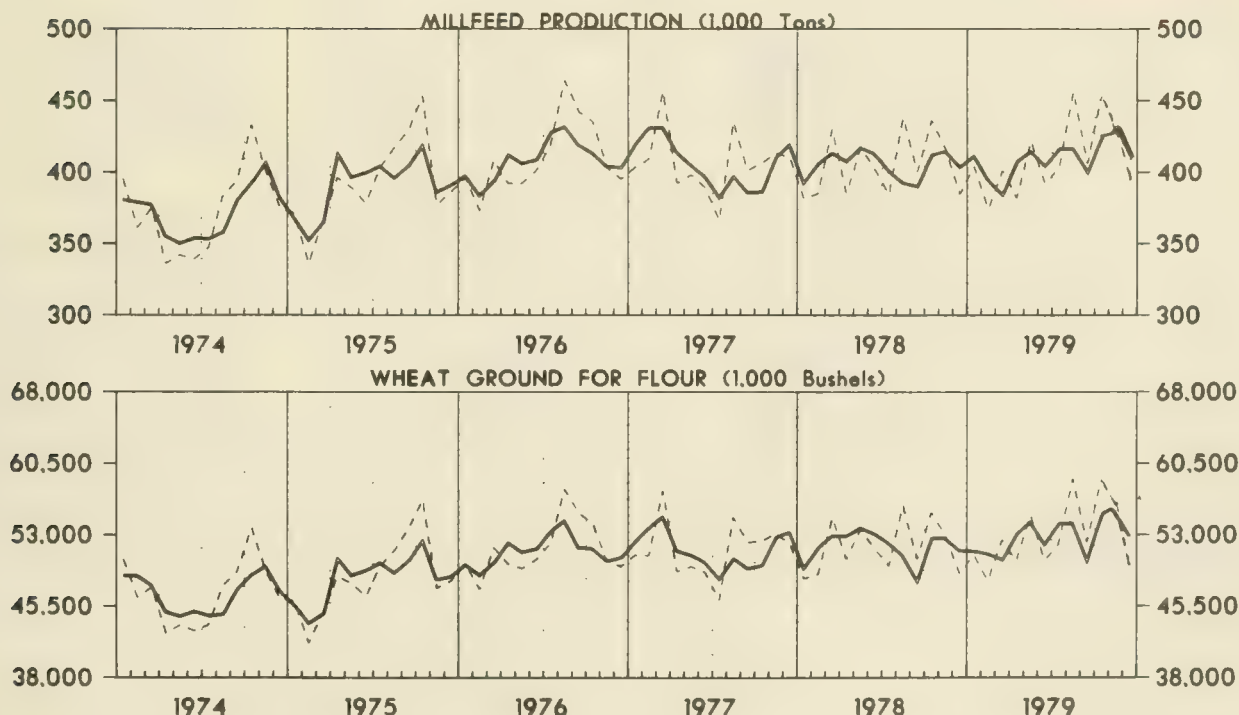
Wheat mills in 1979 and 1978 ground 636.4 and 621.3 million bushels of wheat; corresponding millfeed production figures for these years were 4,945 and 4,860 thousand tons.

Production of rye flour in 1979 amounted to 1,580 thousand cwt. sacks, compared with 1,624 thousand cwt. in 1978. Rye grinding in 1979 and 1978 were 3,589 and 3,673 thousand bushels, respectively.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING:
1974 TO 1979

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Gina M. Pagano, (301) 763-1750.

For sale by Customer Services (DUSD), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price, 30 cents per copy, \$3.30 per year.

Table 1. SUMMARY: COMMERCIAL WHEAT MILLING PRODUCTION: 1970 TO 1979

Year	Wheat flour production (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Average pounds per cwt. sacks of flour		Flour extraction rate ¹ (percent)
				Wheat	Millfeed	
1979.....	284,051	636,375	4,945	134.4	34.8	74.4
1978.....	277,950	621,321	4,860	134.1	35.0	74.6
1977.....	275,784	618,125	4,787	134.5	34.7	74.4
1976.....	275,077	618,284	4,920	135.0	35.8	74.2
1975.....	258,985	582,675	4,701	134.9	36.3	74.1
1974.....	251,097	562,962	4,483	134.5	35.7	74.3
1973.....	254,661	567,287	4,395	133.7	34.5	74.8
1972.....	250,441	557,801	4,303	133.6	34.4	74.8
1971.....	249,810	555,092	4,279	133.3	34.3	75.0
1970.....	253,094	563,714	4,409	133.6	34.8	74.8

¹Wheat flour production as compared with the amount of wheat ground.

Table 2. COMMERCIAL WHEAT MILLING PRODUCTION, SEASONALLY ADJUSTED AND UNADJUSTED, BY MONTHS: 1979 AND 1978

Month	Seasonally adjusted			Unadjusted						
	Wheat flour production average per working day ¹ (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Wheat flour production (1,000 cwt. sacks)		Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Average pounds per cwt. sack of flour		Flour extraction rate ² (percent)
				Average per working day ¹	Calendar month			Wheat	Millfeed	
1979										
Total.....	(X)	(X)	(X)	(X)	284,051	636,375	4,945	134.4	34.8	74.4
January.....	1,080	51,310	409	1,037	22,822	50,999	405	134.1	35.5	74.6
February.....	1,079	51,165	395	1,077	21,547	48,271	375	134.4	34.8	74.4
March.....	1,089	50,987	388	1,066	23,459	52,571	402	134.5	34.3	74.4
April.....	1,088	52,397	405	1,062	22,296	50,319	383	135.4	34.4	73.8
May.....	1,124	53,815	413	1,117	24,578	55,216	423	134.8	34.4	74.2
June.....	1,064	52,758	408	1,025	22,541	50,250	392	133.8	34.8	74.8
July.....	1,163	54,053	419	1,120	23,513	52,111	404	133.0	34.4	75.2
August.....	1,150	54,306	420	1,145	26,340	59,006	458	134.4	34.8	74.4
September.....	1,122	52,801	412	1,226	23,285	52,375	408	135.0	35.0	74.1
October.....	1,124	55,082	427	1,137	26,143	58,904	460	135.2	35.2	74.0
November.....	1,148	55,922	429	1,180	24,783	55,710	437	134.9	35.3	74.1
December.....	1,122	53,134	424	1,137	22,744	50,643	398	133.6	35.0	74.9
1978										
Total.....	(X)	(X)	(X)	(X)	277,950	621,321	4,860	134.1	35.0	74.4
January.....	1,016	49,714	393	990	21,787	48,430	381	133.4	35.0	74.9
February.....	1,096	51,788	406	1,089	21,783	48,910	385	134.7	35.3	74.2
March.....	1,122	53,010	413	1,057	24,330	54,821	430	135.2	35.3	74.0
April.....	1,108	53,000	408	1,127	22,554	50,478	385	134.3	34.1	74.5
May.....	1,111	53,821	417	1,094	24,078	53,601	417	133.6	34.6	74.9
June.....	1,124	53,196	413	1,047	23,051	51,544	402	134.2	34.9	74.5
July.....	1,069	52,176	401	1,063	22,335	49,749	384	133.6	34.4	74.8
August.....	1,087	50,886	393	1,089	25,053	56,062	439	134.3	35.0	74.5
September.....	1,040	48,335	390	1,119	22,456	50,531	400	135.0	35.6	74.1
October.....	1,084	52,742	412	1,129	24,843	55,348	436	133.7	35.1	74.8
November.....	1,093	52,728	415	1,130	23,738	52,934	416	133.8	35.0	74.7
December.....	1,078	51,457	404	1,089	21,942	48,913	385	133.7	35.1	74.8

(X) Not applicable.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.²Wheat flour production as compared with amount of wheat ground.

Table 3. COMMERCIAL RYE MILLING PRODUCTION, BY MONTHS: 1979 AND 1978

Month	Rye flour production (1,000 cwt. sacks)	Rye ground for flour (1,000 bushels)	Millfeed production (tons)	Average pounds ground per cwt. sack of flour		Flour extraction rate ¹
				Rye	Millfeed	(percent)
1979						
Total.....	1,580	3,589	19,363	127.2	23.8	78.6
January.....	134	325	1,937	135.8	28.9	73.6
February.....	115	274	1,652	133.4	28.7	74.9
March.....	147	340	1,958	129.5	26.6	77.2
April.....	136	288	1,594	118.6	23.4	84.3
May.....	123	278	1,510	126.6	24.6	79.0
June.....	129	299	1,785	129.8	27.7	77.0
July.....	130	293	1,639	126.2	25.2	79.2
August.....	137	306	1,544	125.1	22.5	79.9
September.....	131	303	1,642	129.5	25.1	77.2
October.....	149	332	1,613	124.8	21.7	80.1
November.....	129	284	1,374	123.3	21.3	81.1
December.....	120	267	1,115	124.6	18.6	80.3
1978						
Total.....	1,624	3,673	20,430	126.7	25.2	79.0
January.....	147	322	1,802	122.7	24.5	81.5
February.....	131	298	1,674	127.4	25.6	78.5
March.....	128	291	1,543	127.3	24.1	80.4
April.....	126	284	1,591	126.2	25.2	79.2
May.....	130	293	1,544	126.2	23.8	79.2
June.....	137	298	1,712	121.8	25.0	82.1
July.....	114	260	1,308	127.7	22.9	78.3
August.....	123	282	1,450	128.4	23.6	77.9
September.....	129	290	1,739	125.9	27.0	79.4
October.....	149	340	1,909	127.8	25.6	78.3
November.....	159	366	2,183	128.9	27.5	77.5
December.....	151	349	1,975	129.4	26.2	77.3

¹Rye flour production as compared with amount of rye ground.

Table 4. COMMERCIAL WHEAT MILLING PRODUCTION, BY GEOGRAPHIC AREAS: 1979 AND 1978

Geographic areas	1979				1978			
	Wheat ground for flour (1,000 bushels)	Wheat flour production			Wheat ground for flour (1,000 bushels)	Wheat flour production		
		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²
United States.....	636,375	284,051	1,054,589	105.2	621,321	277,950	1,058,873	103.3
Middle Atlantic Division.....	85,180	38,316	151,989	98.5	83,016	37,118	149,451	97.8
New York.....	68,762	30,976	125,326	96.5	66,356	30,041	123,688	95.4
North Central Division.....	337,448	150,782	558,388	105.5	335,429	150,386	570,828	103.7
Ohio.....	35,512	15,591	58,345	104.4	33,000	14,445	57,445	99.8
Indiana.....	16,188	6,884	38,361	70.1	14,878	6,430	28,090	90.4
Illinois.....	37,205	16,418	61,034	105.1	36,638	16,180	59,482	107.9
Michigan.....	10,146	4,429	20,449	84.6	10,416	4,446	20,220	87.5
Minnesota.....	71,602	32,304	129,198	97.7	70,398	31,939	128,038	98.2
Iowa.....	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(D)
Missouri.....	42,975	19,539	67,919	112.4	54,552	24,780	86,310	113.4
Nebraska.....	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(D)
Kansas.....	79,237	35,818	120,491	116.1	76,843	34,731	123,048	111.2
South Atlantic Division.....	42,575	18,038	74,481	94.6	38,500	16,587	68,157	95.8
East South Central Division.....	31,312	13,791	49,830	108.1	30,834	13,389	49,788	105.4
Tennessee.....	24,101	10,686	38,359	108.8	23,939	10,435	37,817	108.1
West South Central Division.....	44,018	19,790	67,813	114.0	42,190	18,613	65,893	111.0
Oklahoma.....	17,863	8,244	29,113	110.6	17,146	7,889	28,345	110.9
Texas.....	19,111	8,423	26,500	124.2	18,259	7,830	26,500	114.2
Mountain Division.....	35,614	16,357	61,995	103.1	34,758	15,716	60,175	103.1
Montana.....	7,958	3,716	13,548	107.1	8,395	3,931	13,736	110.5
Utah.....	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(D)
Pacific Division.....	60,229	26,978	90,093	117.0	56,594	26,141	94,581	108.8
Washington.....	17,125	7,740	27,985	108.0	16,573	7,413	27,781	104.2
Oregon.....	9,449	4,210	18,800	87.5	9,441	4,293	19,800	85.4
California and Hawaii.....	33,655	15,028	41,108	142.8	30,580	14,435	47,000	120.9

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.

¹Capacity as reported for December of each year.²Estimated annual capacity is obtained by multiplying daily capacity by the number of work days during the year: 256 for 1979 and 254 for 1978.

These figures are calculated on the basis of a five day week with allowances for the following holidays: January 1, Memorial Day, July 4, Thanksgiving Day, and December 25.

Table 5. PRODUCTION AND MILL STOCKS OF WHEAT FLOUR, BY QUARTERS:
1979 AND 1978

(Figures in 1,000 cwt. sacks)

Quarter	Production	Mill stocks
1979		
First quarter.....	67,828	3,477
Second quarter.....	69,415	3,895
Third quarter.....	73,138	3,813
Fourth quarter.....	73,670	3,975
1978		
First quarter.....	67,900	4,096
Second quarter.....	69,683	3,459
Third quarter.....	69,844	3,342
Fourth quarter.....	70,523	3,214

Table 6. DURUM WHEAT PRODUCTS: 1979 AND 1978

Item	1979		1978	
	Jan. 1- June 30	July 1- Dec. 31	Jan. 1- June 30	July 1- Dec. 31
Durum wheat ground (1,000 bushels).....	19,058	19,927	17,683	19,748
Straight semolina and durum flour produced (1,000 cwt. sacks).....	8,599	8,805	7,786	8,702
Blended semolina and durum flour produced (1,000 cwt. sacks).....	(D)	(D)	(D)	(D)

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Table 7. PRODUCTION AND EXPORTS OF WHEAT FLOUR: 1979

(Quantity in 1,000 cwt.; value in \$1,000)

Product code	Item	Quantity produced	Exports of domestic merchandise ¹		Percent exports to manufacturers' production
			Quantity	Value	
20411 --	Wheat flour.....	284,051	20,927	226,861	7.4

Note: Comparison of domestic production and export codes is as follows:

<u>Domestic output</u>	<u>Export</u>
20411 -- Wheat flour	131.4010-131.4040

¹Source: Bureau of the Census Report FT-410, U.S. Exports of Domestic Merchandise; SIC-Based Products and Area.

DESCRIPTION OF SURVEY

Scope of Survey—This survey is a mail canvass of firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, *Flour Milling Products*. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1977 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1977 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

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Method II seasonal adjustment program. This program is a ratio-to-moving average method. It largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data provide a better measure of the month-to-month variations which are due to factors other than seasonal pattern. Additional information concerning seasonal adjustment is available in the seasonal adjustment supplement issued in this series.

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f. *"Direct" vs "Total" Commodity Exports and Imports*—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

h. *Geographic Area of Coverage*—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the

United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

HISTORICAL NOTE

The current M20A series of monthly reports with annual summaries of wheat ground and wheatmilling products originated in May 1923. Data by States have been published monthly since 1927. Beginning in 1931 and ending with the June 1947 report, monthly wheat flour production by capacity groups was published. The annual summary report during the years 1931 to 1964 also contained a table showing production by capacity groups. Past copies of this report and other Current Industrial Reports can be found in the Federal Depository Library in your area. These libraries keep Current Industrial Reports (called Facts for Industry, before 1959) permanently available.

RELATED REPORTS

A monthly report is also published in this series.

The Bureau of the Census publishes reports on other related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Gina M. Pagano	(301) 763-1750
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Customer Services (DUSD)	(301) 449-1600
To order Census Bureau microfiche	Maria Brown	(301) 763-5511

ACKNOWLEDGMENTS

This report was prepared in the Industry Division under the direction of Robert J. Nealon, Chief, Current Nondurables Branch. Gina M. Pagano was directly responsible for the review of the data and preparation of the report. Roger Bugenhagen, Chief of the Division, and John R. Wikoff, Assistant Chief for Current Programs, provided overall direction and coordination to this project.

CURRENT CONSTRUCTION REPORTS

CONSTRUCTION accounts for approximately 11 percent of the gross national product!

To assist industry representatives, research specialists, market analysts, and government officials interested in this vital segment of the Nation's economy, the Bureau of the Census issues **monthly, quarterly, and annual** reports on the value of new construction put in place, building permits, housing starts, housing completions, housing sales, alterations and repairs and demolition of residential structures.

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C21 - New Residential Construction in Selected Standard Metropolitan Statistical Areas

C22 - Housing Completions

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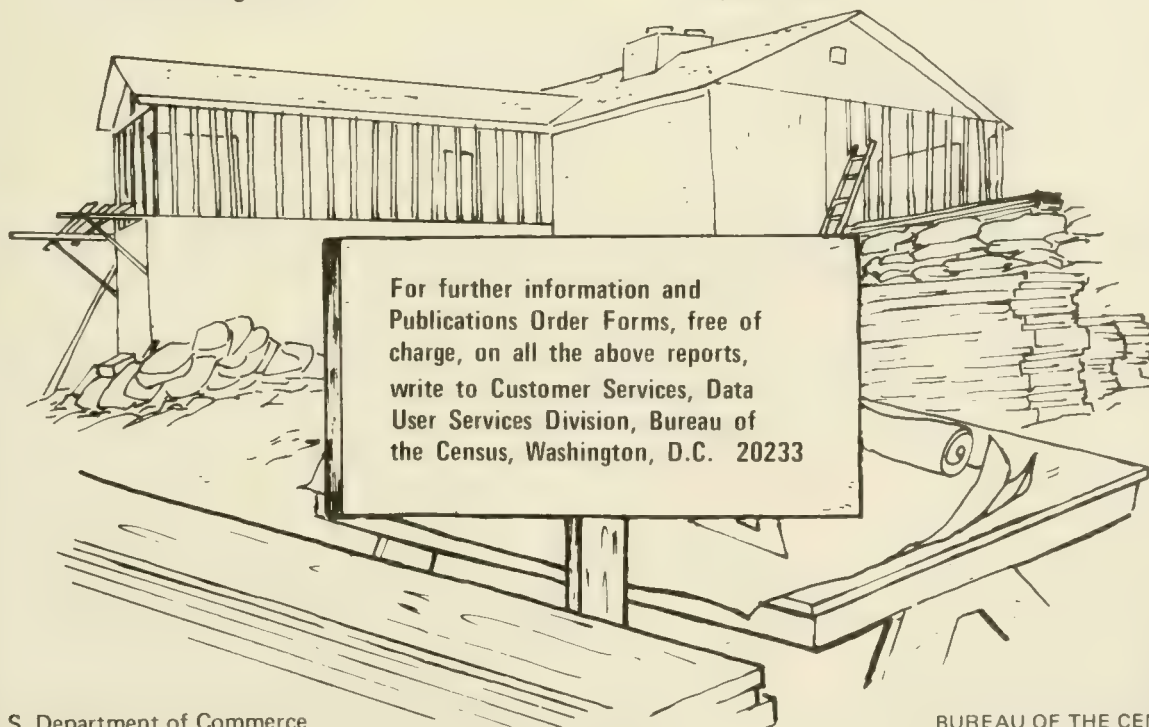
C27 - Price Index of New One-Family Houses Sold

C30 - Value of New Construction Put in Place

C40 - Housing Authorized by Building Permits and Public Contracts

C45 - Permits Issued for Demolition of Residential Structures in Selected Cities

C50 - Expenditures on Residential Additions, Alterations, Maintenance and Repairs, and Replacements



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Flour Milling Products



U.S. Department of Commerce
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Seasonal Adjustment Supplement 1975 to 1979

M20A Supplement
Issued June 1980

This report presents seasonally adjusted data for the years 1975 to 1979 for a number of the more important series published monthly in Current Industrial Reports Series M20A, **Flour Milling Products**. The data for the years 1959 to 1974

were excluded from this publication because there were no significant changes. These data are available in the M20A Seasonal Adjustment Supplement published on March 31, 1971 and in February 1979.

Table 1. WHEAT FLOUR PRODUCTION, AVERAGE PER WORKING DAY

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
SEASONALLY ADJUSTED SERIES--(1,000 CWT. SACKS)												
1975.....	995	931	961	1028	1033	1022	1062	1048	1070	1070	1091	995
1976.....	1073	1005	1061	1082	1082	1070	1088	1155	1055	1066	1035	993
1977.....	1062	1142	1173	1064	1053	1048	1040	1063	1079	1038	1086	1074
1978.....	1013	1093	1116	1110	1107	1127	1068	1081	1057	1092	1084	1079
1979.....	1081	1079	1089	1087	1124	1114	1162	1150	1121	1123	1148	1120
ORIGINAL SERIES--(1,000 CWT. SACKS)												
1975.....	927	925	951	981	1016	980	1008	1083	1132	1100	1171	978
1976.....	1062	1054	1003	1017	1106	1015	1048	1169	1117	1147	1062	959
1977.....	1076	1136	1121	1042	1053	990	1028	1062	1113	1114	1133	1062
1978.....	990	1089	1057	1127	1094	1047	1063	1089	1119	1129	1130	1089
1979.....	1037	1077	1066	1061	1117	1073	1119	1145	1225	1136	1180	1135
SEASONAL FACTORS WITH TRADING-DAY--PERCENT												
1975.....	97.105	99.397	98.976	95.421	98.398	95.882	94.949	103.318	105.771	102.846	108.367	98.298
1976.....	98.999	104.918	94.567	93.991	102.172	94.824	96.296	101.200	105.831	107.627	102.625	96.619
1977.....	101.347	99.496	95.542	97.974	100.000	94.446	98.804	99.869	103.147	107.327	104.376	98.899
1978.....	97.700	99.596	94.673	101.574	98.789	92.920	99.492	100.773	105.844	103.400	104.247	100.958
1979.....	95.941	99.794	97.898	97.589	99.391	96.360	96.300	99.538	109.307	101.146	102.757	101.347
SEASONAL FACTORS WITH TRADING-DAY, ONE YEAR AHEAD--PERCENT												
1980.....	96.331	101.506	101.141	96.615	100.901	95.982	94.949	104.960	102.625	100.122	110.352	96.432

Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Robert Rivera, (301) 763-7108.

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Table 2. MILLFEED PRODUCTION

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
SEASONALLY ADJUSTED SERIES--(1,000 TONS)												
1975.....	367	353	367	413	399	399	405	396	405	418	386	393
1976.....	398	383	395	411	407	409	430	432	421	412	401	406
1977.....	417	431	434	412	403	399	383	398	390	386	405	426
1978.....	390	406	415	406	413	414	404	395	398	410	408	408
1979.....	408	394	387	404	411	407	418	418	410	426	428	423
ORIGINAL SERIES--(1,000 TONS)												
1975.....	371	336	366	396	389	378	403	417	429	453	377	386
1976.....	396	373	408	392	392	401	419	464	442	435	403	395
1977.....	403	409	456	392	398	389	366	435	401	406	413	410
1978.....	381	385	430	385	417	402	384	438	400	436	416	384
1979.....	404	374	401	382	421	391	403	456	406	459	436	397
SEASONAL FACTORS WITH TRADING-DAY--PERCENT												
1975.....	101.002	95.136	99.666	95.809	97.595	94.665	99.538	105.279	105.941	108.346	97.713	98.273
1976.....	99.398	97.344	103.222	95.280	96.334	97.942	97.495	107.369	104.939	105.574	100.397	97.180
1977.....	96.530	94.839	105.062	95.126	98.803	97.566	95.548	109.383	102.810	105.056	101.905	96.292
1978.....	97.708	94.740	103.517	94.755	100.899	96.986	95.158	110.996	100.493	106.373	102.010	94.171
1979.....	99.081	94.938	103.507	94.567	102.402	96.120	96.413	109.151	98.994	107.767	101.806	93.884
SEASONAL FACTORS WITH TRADING-DAY, ONE YEAR AHEAD--PERCENT												
1980.....	100.356	98.106	101.430	97.841	100.400	94.959	98.924	106.656	100.800	107.340	100.276	96.758

Table 3. WHEAT GROUND FOR FLOUR

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
SEASONALLY ADJUSTED SERIES--(1,000 BUSHELS)												
1975.....	45543	43833	44909	50760	49050	48987	50057	49232	50622	52364	48482	48903
1976.....	50077	48598	50330	51882	51267	51903	53650	54049	52382	51716	50124	50767
1977.....	52149	53888	54858	51639	50240	50204	48597	50619	50615	49773	52528	53832
1978.....	49116	51897	53060	52670	53335	53097	52282	50643	50564	52025	51738	51828
1979.....	51197	51051	50874	52278	53696	52819	53933	54184	52674	54856	54545	53268
ORIGINAL SERIES--(1,000 BUSHELS)												
1975.....	46045	41658	44896	48602	47919	46513	59718	51379	53627	56685	47421	48212
1976.....	49976	47296	51695	49946	49488	50430	52145	57825	55294	54225	50273	49691
1977.....	50852	50840	57635	49184	49688	49072	46149	54844	52244	52352	53159	52106
1978.....	48430	48910	54821	50478	53601	51544	49749	56062	50506	55348	52934	48913
1979.....	50886	48163	52454	50205	55093	50308	51995	58874	52249	58772	55586	50530
SEASONAL FACTORS WITH TRADING-DAY--PERCENT												
1975.....	101.103	95.037	99.971	95.748	97.695	94.949	99.323	104.361	105.936	108.253	97.812	98.588
1976.....	99.799	97.321	102.713	96.269	96.531	97.162	97.194	106.986	105.560	104.851	100.297	97.880
1977.....	97.514	94.353	105.063	95.246	98.902	97.745	94.963	108.346	103.218	105.181	101.202	96.793
1978.....	98.602	94.244	103.318	95.838	100.499	97.075	95.154	110.700	99.884	106.387	102.312	94.376
1979.....	99.393	94.343	103.106	96.035	102.603	95.246	96.407	108.655	99.194	107.139	101.908	94.860
SEASONAL FACTORS WITH TRADING-DAY, ONE YEAR AHEAD--PERCENT												
1980.....	101.168	97.015	101.347	98.374	100.400	95.246	98.913	105.634	100.801	107.145	100.082	97.079

Table 4. AVERAGE PERCENTAGE AND RELATED MEASURES FOR SERIES COMPONENTS

Item	Average percentage changes for 1 month span				Ratio of irregular component to cyclical component (\bar{I}/\bar{C})	Number of months for cyclical dominance (MCD)	I/C for MCD span	Average duration of run			MCD
	Original unadjusted series (\bar{O})	Seasonally adjusted series (\bar{CI})	Irregular component (\bar{I})	Cyclical component (\bar{C})				\bar{CI}	\bar{I}	\bar{C}	
Wheat flour production, average per working day.....	5.45	3.01	2.88	.63	4.61	6	1.05	1.54	1.44	5.11	3.07
Millfeed production.....	5.50	2.40	2.17	.64	3.42	6	.79	2.07	1.77	4.77	3.00
Wheat ground for flour.....	5.31	2.53	2.34	.63	3.82	6	.89	1.86	1.81	5.11	2.87

The seasonal adjustments were made using the X-11 variant of the Bureau of the Census seasonal adjustment program. The X-11 program incorporates techniques for the treatment of extreme values, and a regression program to identify trading-day adjustment to the monthly aggregates. Both of these procedures have been used for the series presented in this publication. A short description of the adjustment process follows below. Further detail is described in the literature on this method.¹ It should be noted that the data included in this report are adjusted on an establishment basis, prior to tabulation, for variation in the length of the reporting period, such as 4-week, 5-week, or calendar month.

For each series included in this report the following information is shown:

1. Seasonally-adjusted data
2. Original series. Data without seasonal adjustment.
3. Seasonal adjustment factors. With trading-day the seasonally-adjusted data are obtained by dividing the unadjusted data by the seasonal factors with trading day for the specific month.
4. Average percentage changes and related measures for each series.

The seasonally adjusted data were developed for each of the detailed series shown. Beginning in the January 1979 publication, these seasonally adjusted data were included in the regular report. That report also includes a detailed description of the survey, including a discussion of the scope and coverage of the report together with an explanation of the terms.

TRADING-DAY FACTORS

Variation in the rate of activity that arises for the existence of different numbers of trading days in the same month for different years can be an important cause of month-to-month irregular fluctuations. Unlike some other causes of irregular fluctuations such as unexpected economic developments, unusual weather, and statistical errors, trading-day irregularities can be approximately identified and removed so that the underlying trend cycle stands out more clearly. Hence, it is often possible to reduce the irregular factor by a trading-day adjustment.

BASIC STEPS OF THE X-11 SEASONAL ADJUSTMENT PROGRAM

1. A 12-month centered moving average of the original series is computed to obtain a first-round estimate of the trend-cycle component.
2. This trend-cycle estimate is divided into the original series to obtain preliminary seasonal-irregular (S-I) ratios.
3. A weighted 5-term moving average of these S-I ratios (with weights 1, 2, 3, 2, 1) is computed for each of the 12 calendar

months separately to average out the influence of irregular movements and to obtain first-round estimates of the seasonal factors. The use of a moving average yields a distinct seasonal factor for each month of each year. Thus, the first-round seasonal factor, for, say, January 1975 is derived from the five January S-I ratios for the years 1973 to 1977, inclusive.

Unfortunately, sufficient year-ahead data are not available for the 2 years at the end of a time series to calculate this 5-term average. For example, a 5-term average centered in 1978 requires S-I ratios for 1976 through 1980 inclusive, while for this article 1979 is the last year for which data are available. To compensate for the lack of future data, the X-11 weights the available S-I ratios (which for 1979 factors are the S-I ratios for 1977, 1978, and 1979) more heavily than if future data were available. For example, in calculating the first-round seasonal factor for January 1979, the January 1979 S-I ratio is given a weight of .407, while in computing the first-round seasonal factor for January 1979, the January 1976 S-I ratio is given a weight of only .333.

4. These factors are adjusted to sum to 12.000 in ratio form, or 1.200 in index number form, over any 12-month period so that year-to-year changes in the series are unaffected.

5. These adjusted first-round seasonal factors are divided into the S-I ratios to get an estimate of the irregular component.

6. A moving 5-year (60 month) standard deviation (σ) of these irregular component estimates is calculated, and the irregulars in the central year of the 5-year period are tested against 2.5σ . Irregulars greater than 2.5σ are removed, and the moving 5-year standard deviation is again computed. If the irregular for a month in the central year is:

a. greater than 2.5σ , it is considered an extreme value, and the corresponding S-I ratio is removed and replaced by an average of the two nearest preceding and two nearest following full weight (i.e., unmodified) S-I ratios for that month.

b. less than 1.5σ , then the corresponding S-I ratio for that month is given full weight;

c. between 2.5σ and 1.5σ a linearly graduated weight between 0.0 and 1.0 is assigned to the irregular, and the corresponding S-I ratio is replaced with an average of the ratio times its assigned weight and the two nearest preceding and two nearest following full weight S-I ratios for that month.

This graduated treatment of extremes is designed to limit the influence of unusually large irregular movements on seasonal factors.

7. A weighted 5-term moving average of the S-I ratios is again calculated separately for each month—this time with extreme values replaced as described in step 6—to obtain modified first-round seasonal factors. Again these seasonal factors are adjusted to sum to 12.000 over any 12-month period.

8. These modified first-round seasonal factors are divided into the original series to get a preliminary seasonally adjusted series.

9. A special weighted moving average (the so-called Hender-son average) is applied to this preliminary seasonally adjusted series to obtain a revised estimate of the trend-cycle component. The span of this moving average depends on the variability of the irregular component relative to that of the trend-cycle

¹ **Electronic Computers and Business Indicators**, National Bureau of Economic Research Occasional Paper 57 (New York, 1957); **Tests and Revisions of Bureau of the Census Methods of Seasonal Adjustments**, Bureau of the Census Technical Paper No. 5 (Washington, 1961, \$1.00); **The X-11 Variant of the Census Method II Seasonal Adjustment Program**, Bureau of the Census Technical Paper No. 15 (Washington, 1967, \$.50).

component, with the more irregular the series, the longer the span. A preliminary estimate of the variability of the irregular relative to the trend cycle is obtained using a 13-month Henderson average.

10. This revised trend-cycle estimate is divided into the original series to obtain revised S-I ratios.

11. A weighted 5-term moving average (with weights, 1, 2, 3, 2, 1) of these S-I ratios is computed separately for each month to obtain revised seasonal factor estimates. Thus, the seasonal factor for, say, January 1977 is derived from the five January S-I ratios for the years 1975 to 1979, inclusive. Sufficient year-ahead data are not available for the 3 years at the end of the series to compute this 5-term average. For example, a 5-term average centered in 1979 needs data from 1977 to 1981, inclusive, and (as of the end of 1979) data from 1980 and 1981 are not available. To compensate for this lack of future data, the X-11 weights the available S-I ratios more heavily than if future data were available. For example, in computing the revised January 1979 seasonal factor, the January S-I ratio for 1979 is given a weight of .283, while in computing the revised January 1979 seasonal factor, the January 1976 S-I ratio is given a weight of only .200.

12. These revised seasonal factors are divided into the S-I ratios to get new estimates of the irregular component, and the S-I ratios are modified for extremes by the same method as described in step 6.

13. A weighted 5-term moving average of these modified S-I ratios is computed separately for each month to obtain the X-11's final seasonal factors. These factors are again adjusted to sum to 12.000 over any 12-month period.

14. These final seasonal factors are divided into the original series to obtain the X-11's final seasonally adjusted series.

15. Preliminary seasonal factors for the upcoming year are estimated from the formula

$$S_{n+1} = S_n + 1/2(S_n - S_{n-1})$$

where S_n = the seasonal factor for year n .

BRIEF DEFINITIONS OF MEASURES SHOWN IN TABLE 4

The following are brief definitions; more complete explanations appear in **Electronic Computers and Business Indicators**,

by Julius Shiskin, issued as Occasional Paper 57 (reprinted from **Journal of Business**, October 1957).

\bar{O} is the average month-to-month percentage change without regard to sign of the original unadjusted series.

\bar{CI} is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series (i.e., the series after adjustment for measurable seasonal, trading-day and holiday variations).

\bar{I} is the same for the irregular component, obtained by dividing the cyclical component into the seasonally adjusted series.

\bar{C} is the same for the cyclical component, a smooth, flexible moving average of the seasonally adjusted series.

\bar{I}/\bar{C} is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series. It is shown for 1-month spans and for spans of the period of MCD. When MCD is "6", no \bar{I}/\bar{C} ratio is shown for the MCD period.

MCD (Months for Cyclical Dominance) provides an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. It is small for smooth series and large for irregular series. In deriving MCD, percentage changes are computed separately for the irregular component and the cyclical component over 1-month spans (Jan.-Feb., Feb.-Mar., etc.), 2-month spans (Jan.-Mar., Feb.-Apr., etc.), up to 12-month spans. Averages, without regard to sign, are then computed for the changes over each span. MCD is the shortest span in months for which the average percentage change (without regard to sign) in the cyclical component is larger than the average percentage change (without regard to sign) in their regular component, and remains so. Thus, it indicates the point at which fluctuations in the seasonally adjusted series became dominated by cyclical rather than irregular movements. All series with an MCD greater than "5" are shown as "6".

ADR (Average Duration of Run) is another measure of smoothness and is equal to the average number consecutive monthly changes in the same direction in any series of observations. Where there is no change between two months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD curve. The MCD curve is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

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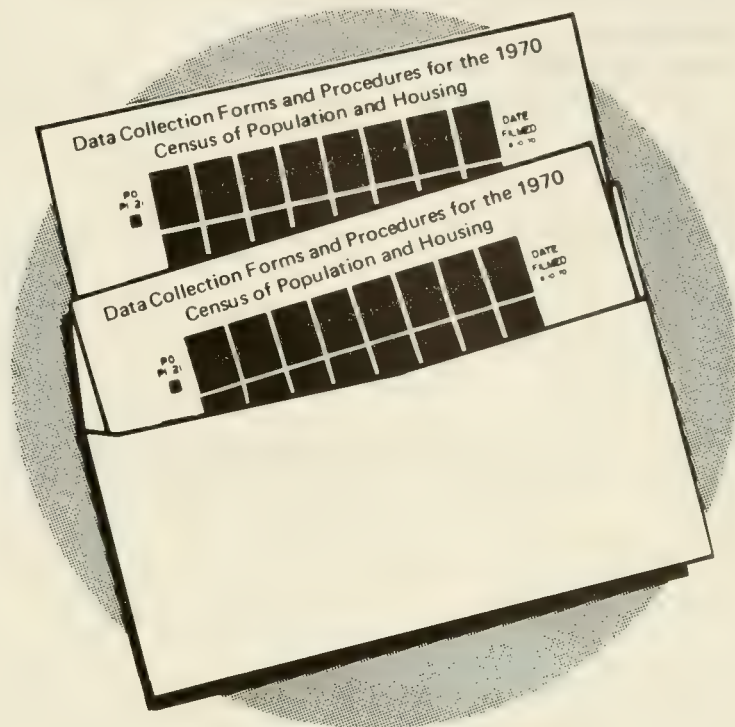
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M 20 A(80) - 1

Flour Milling Products

U.S. Department of Commerce
BUREAU OF THE CENSUS

JANUARY 1980

M20A(80)-1
Issued April 1980

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

THE GRAPHIC PRESENTATION FOR THIS SURVEY WAS NOT AVAILABLE AT THE TIME OF PUBLICATION.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1977 TO 1980

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1980			
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788
January.....	1,065	393	49,714

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1977 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1980								
January (22 days)	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days)	1,136	22,739	396,985	50,530	3,975	1,059	107.3	75.0
November (21 days)	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days)	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.1
September (19 days)	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days)	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days)	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days)	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days)	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days)	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days)	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days)	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days)	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days)	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days)	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days)	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September (20 days)	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August (23 days)	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July (20 days)	1,117	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June (22 days)	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5
May (22 days)	1,094	24,078	417,032	53,601	(NA)	1,039	105.3	74.5
April (20 days)	1,127	22,554	385,227	50,478	(NA)	1,039	108.5	74.5
March (23 days)	1,057	24,330	430,260	54,821	4,096	1,039	101.8	73.8
February (20 days)	1,086	21,783	385,269	48,910	(NA)	1,077	100.9	74.2
January (21 days)	1,037	21,787	380,717	48,430	(NA)	1,077	92.0	74.9

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 1. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	January 1980	December 1979	January 1978
	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	3,377	2,990	3,012
20411 53	Straight semolina durum flour.....	M cwt.....	1,464	1,294	1,349
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)	D
	Rye:				
20416 51	Rye ground for flour.....	M bu.....	351	267	325
20416 11	Rye flour production.....	M cwt.....	153	120	134
20416 18	Rye millfeed production.....	Tons.....	2,022	1,115	1,937
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	18	(NA)
	24 hour capacity.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 2. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	January 1980		December 1979		January 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	54,955	24,558	50,530	22,739	50,886	22,811
Middle Atlantic.....	7,109	3,204	7,046	3,221	7,147	3,221
New York.....	5,751	2,599	5,626	2,581	5,845	2,641
North Central.....	29,417	13,335	26,673	11,474	26,175	11,801
Illinois.....	3,321	1,469	2,749	1,213	2,963	1,281
Indiana.....	1,367	594	1,259	545	1,425	611
Illinois.....	3,227	1,422	2,822	1,252	2,846	1,261
Michigan.....	840	369	714	311	836	371
Minnesota.....	6,587	2,436	5,947	2,696	5,084	2,311
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,401	1,559	3,318	1,510	4,058	1,811
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,799	3,078	6,537	2,958	6,238	2,821
South Atlantic.....	3,818	1,673	3,351	1,468	3,147	1,361
East South Central.....	2,533	1,108	2,447	1,074	2,554	1,111
Alabama.....	1,930	847	1,837	811	1,961	871
West South Central.....	3,754	1,694	3,643	1,642	3,550	1,511
Texas.....	1,414	700	1,476	685	1,536	711
Oklahoma.....	1,612	715	1,601	706	1,454	681
Montana.....	2,934	1,342	2,720	1,256	2,928	1,311
Wyoming.....	639	296	674	315	667	301
Idaho.....	(D)	(D)	(D)	(D)	(D)	(D)
Utah.....	5,390	2,327	4,650	2,104	5,183	2,181
Nevada.....	1,567	707	1,378	624	1,677	711
Arizona.....	768	342	641	281	785	311
California and Hawaii.....	3,055	1,278	2,631	1,187	2,721	1,111

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	December 1979	November 1979	12 months through December 1979
WHEAT FLOUR, EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	361	284	2,636
Egypt.....	2	37	406
Guatemala.....	-	-	41
Colombia.....	-	-	-
Ecuador.....	2	-	6
Brazil.....	-	-	2
Israel.....	4	6	128
India.....	114	18	257
Chile.....	38	4	164
Sri Lanka (Ceylon).....	-	34	141
Philippine Republic.....	-	33	302
Morocco.....	117	60	413
Other.....	84	92	776
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 AND 1314040) (1,000 cwt.)			
Total.....	1,971	843	18,291
Nicaragua.....	-	-	12
Jamaica.....	18	19	357
Brazil.....	-	-	38
Iceland.....	10	1	54
Jordan.....	-	-	28
Saudi Arabia.....	428	464	3,691
Sri Lanka (Ceylon).....	-	-	1,681
Egypt.....	1,360	242	9,565
Philippine Republic.....	2	26	29
Korean Republic.....	-	-	75
Morocco.....	-	75	-
Other.....	153	16	2,761
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	114,879	108,882	1,222,487
U.S.S.R.....	24,469	12,851	197,072
Venezuela.....	2,952	2,656	26,899
Peru.....	-	1,993	14,505
Brazil.....	3,659	3,807	56,100
Portugal.....	2,822	-	20,383
Iran.....	-	-	22,445
Indonesia.....	1,800	1,519	21,956
Korean Republic.....	3,607	5,658	61,664
China (Taiwan).....	3,152	2,204	28,410
Japan.....	11,056	9,018	123,128
Egypt.....	5,069	3,881	47,718
Nigeria.....	2,940	3,389	33,951
Other.....	53,353	61,906	568,256

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt., value in thousands of dollars)

Product	Wheat flour production		Exports of domestic merchandise ¹		Percent exports to manufacturers shipments	
	Quantity	Value	Quantity	Value	Quantity	Value
DECEMBER 1979						
Wheat flour.. .. .	24,553	(NA)	2,332	29,222	9.4	(NA)
NOVEMBER 1979						
Wheat flour.. .. .	22,739	(NA)	1,127	13,485	4.9	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	

NA Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, **Flour Milling Products**. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are “imputed” from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the

Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, “What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?”, the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. **Valuation**—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c. i. f. (cost, insurance, and freight), duty, and other charges to the import point.

b. Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

d. Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. "Direct" vs "Total" Commodity Export and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Gina M. Pagano	(301) 763-7837
Foreign Trade publications	Juanita Noone	(301) 763-5140
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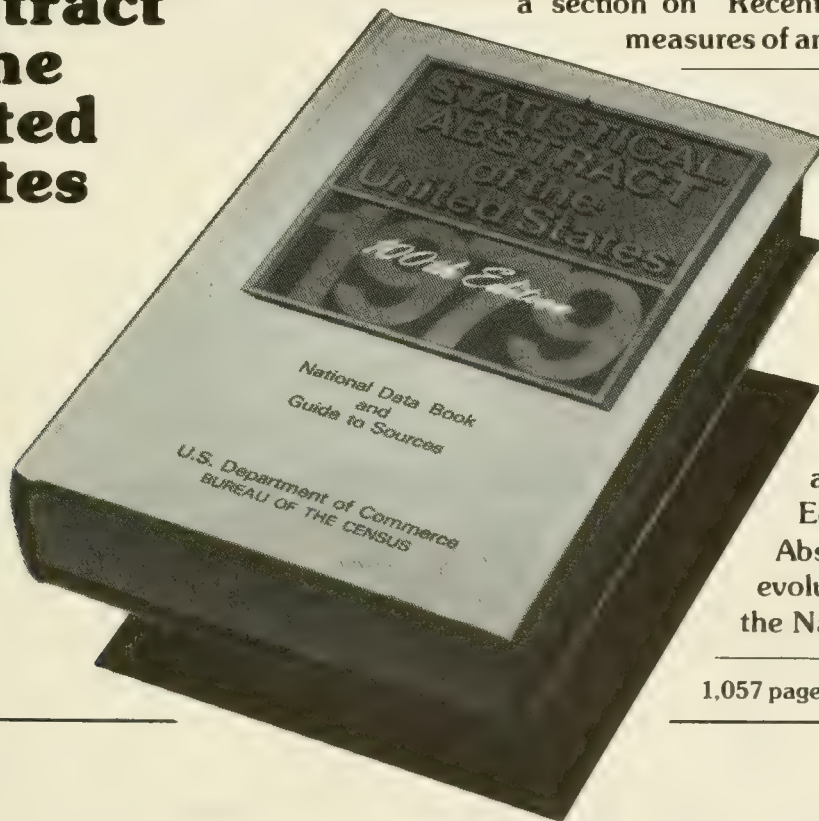
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Flour Milling Products



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FEBRUARY 1980

M20A(80)-2
Issued April 1980

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 6.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1975 TO 1980

— Seasonally Adjusted
- - - Not Seasonally Adjusted

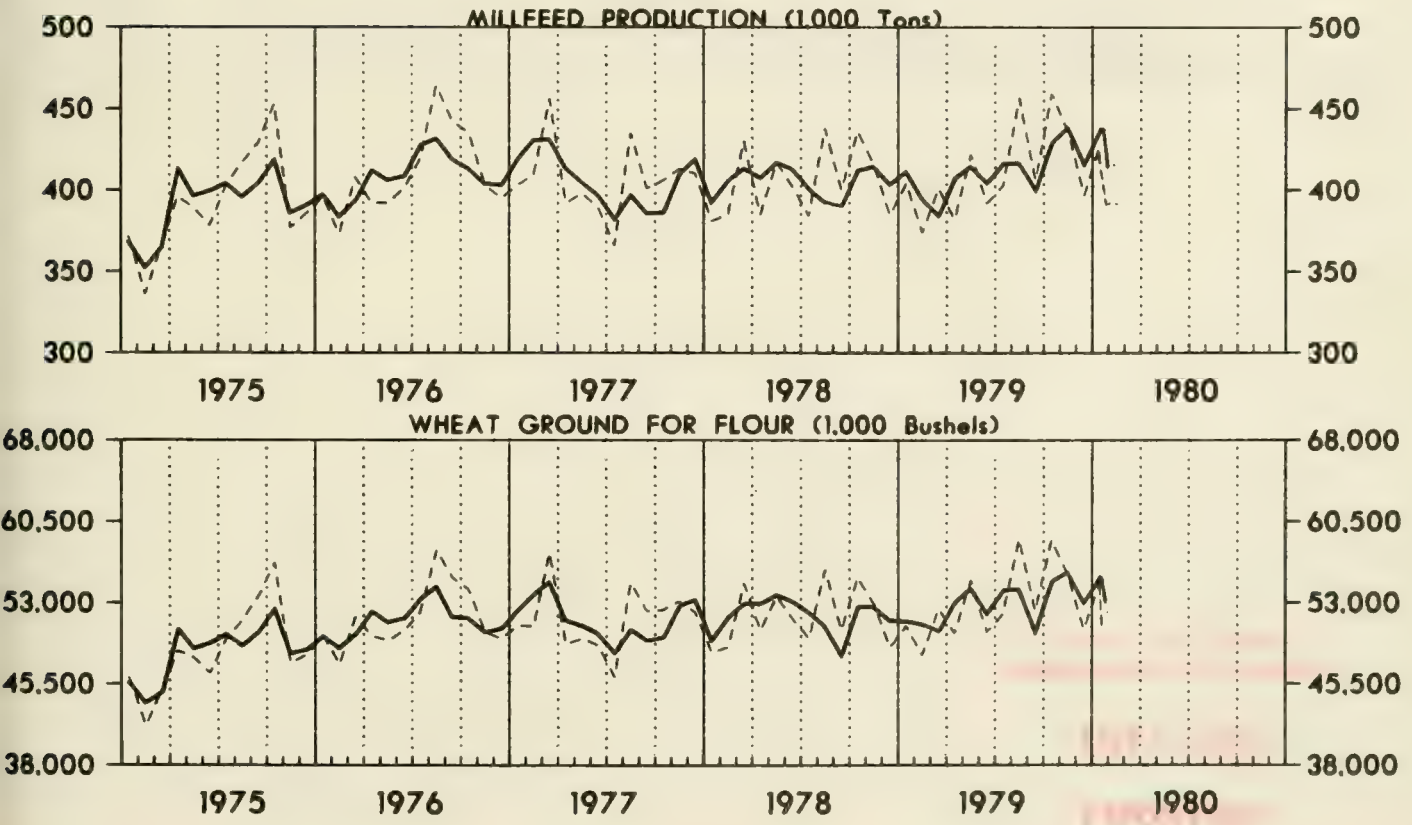


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Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
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¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
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December (20 days).....	1,136	22,739	396,985	50,530	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.1
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days).....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September (20 days).....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August (23 days).....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July (20 days).....	1,117	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June (22 days).....	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5
May (22 days).....	1,094	24,078	417,032	53,601	(NA)	1,039	105.3	74.5
April (20 days).....	1,127	22,554	385,227	50,478	(NA)	1,039	108.5	74.5
March (23 days).....	1,057	24,330	430,260	54,821	4,096	1,039	101.8	73.8
February (20 days).....	1,086	21,783	385,269	48,910	(NA)	1,077	100.9	74.2
January (21 days).....	1,037	21,787	380,717	48,430	(NA)	1,077	92.0	74.9

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	February 1980	January 1980	January 1979
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,894	3,377	3,012
20411 55	Straight semolina durum flour.....	M cwt.....	1,373	1,464	1,349
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	283	351	325
20416 18	Rye flour production.....	M cwt.....	126	153	13
20416 11	Rye millfeed production.....	Tons.....	1,561	2,011	1,931
	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	February 1980		January 1980		February 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	50,330	22,614	55,167	24,654	48,163	21,542
Middle Atlantic.....	6,523	2,945	7,109	3,204	6,894	3,137
New York.....	4,936	2,239	5,751	2,599	5,527	2,499
North Central.....	26,499	11,887	29,417	13,205	24,609	11,067
Ohio.....	2,915	1,293	3,321	1,469	2,587	1,126
Indiana.....	1,054	455	1,367	594	1,340	562
Illinois.....	3,077	1,348	3,227	1,422	2,787	1,237
Michigan.....	851	325	840	369	741	326
Minnesota.....	5,916	2,686	6,587	2,986	5,032	2,270
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,270	1,485	3,401	1,559	3,644	1,691
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,886	2,672	6,799	3,078	5,521	2,492
South Atlantic.....	3,664	1,616	3,818	1,673	3,340	1,466
East South Central.....	2,457	1,078	2,533	1,108	2,486	1,081
Tennessee.....	1,873	823	1,930	847	1,906	834
West South Central.....	3,742	1,698	3,777	1,704	3,334	1,497
Oklahoma.....	1,565	727	1,514	700	1,271	585
Texas.....	1,643	736	1,635	725	1,488	659
Mountain.....	2,584	1,217	2,934	1,342	2,552	1,165
Montana.....	648	304	639	296	661	302
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,861	2,173	5,579	2,418	4,948	2,129
Washington.....	1,440	650	1,567	707	1,361	615
Oregon.....	795	365	^r 957	^r 433	813	302
California and Hawaii.....	2,626	1,158	3,055	1,278	2,774	1,212

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

^rRevised by 5 percent or more from previously published figures.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	January 1980	December 1979	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1000 cwt.)			
Total.....	75	361	75
Dominican Republic.....	1	1	1
Honduras.....	3	-	3
Guatemala.....	1	-	1
Colombia.....	-	-	-
Ecuador.....	-	2	-
Peru.....	2	8	2
Brazil.....	1	-	1
Bolivia.....	-	34	-
Chile.....	15	38	15
Morocco.....	11	117	11
Egypt.....	23	-	23
Israel.....	-	4	-
Jordan.....	2	-	2
India.....	2	114	2
Sri Lanka.....	-	-	-
Somalia.....	1	-	1
Philippines.....	-	-	-
Other.....	13	43	13
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1000 cwt.)			
Total.....	1,018	1,971	1,018
Canada.....	4	-	4
Mexico.....	4	1	4
Bahamas.....	7	8	7
Jamaica.....	3	18	3
Honduras.....	-	-	-
Nicaragua.....	-	-	-
Colombia.....	1	2	1
Peru.....	-	-	-
Brazil.....	-	-	-
Bolivia.....	27	46	27
Surinam.....	25	13	25
Iceland.....	-	10	-
Morocco.....	-	-	-
Egypt.....	675	1,360	675
Jordan.....	-	-	-
Lebanon.....	-	-	-
Saudi Arabia.....	230	428	230
United Arab Emirates.....	14	1	14
India.....	-	-	-
Sri Lanka.....	-	-	-
Korean Republic.....	-	-	-
Philippines.....	-	2	-
Other.....	28	82	28
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1000 bu.)			
Total.....	82,667	114,879	82,667
Mexico.....	4,579	4,989	4,579
Jamaica.....	50	-	50
Haiti.....	598	-	598
Honduras.....	69	309	69
El Salvador.....	184	588	184
Costa Rica.....	441	-	441
Panama.....	315	132	315
Venezuela.....	2,526	2,952	2,526
Colombia.....	3,445	2,018	3,445
Ecuador.....	1,722	470	1,722
Peru.....	895	-	895
Brazil.....	1,517	3,659	1,517
Bolivia.....	979	-	979
Chile.....	996	1,024	996
Surinam.....	159	-	159
Portugal.....	2,314	2,822	2,314
German Democratic Republic.....	1,725	-	1,725
Poland.....	1,076	-	1,076
U.S.S.R.....	12,240	24,469	12,240
Morocco.....	2,203	-	2,203
Egypt.....	7,447	5,069	7,447
Israel.....	1,102	3,014	1,102
Iraq.....	522	-	522
Iran.....	-	-	-
Pakistan.....	2,058	1,837	2,058
Bangladesh.....	1,110	-	1,110
China (Taiwan).....	1,176	3,152	1,176
Korean Republic.....	7,001	3,607	7,001
Indonesia.....	3,621	1,800	3,621
Philippines.....	1,918	2,007	1,918
Nigeria.....	2,490	2,940	2,490
Other.....	16,189	48,021	16,189

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments	
	Quantity	Value	Quantity	Value	Quantity	Value
JANUARY 1980						
Wheat flour.....	22,614	(NA)	1,093	13,858	4.8	(NA)
DECEMBER 1979						
Wheat flour.....	24,553	(NA)	2,332	29,222	9.4	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	-

(NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, **Flour Milling Products**. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

d. *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report	Gina Pagano	(301) 763-7837
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
To order Census Bureau microfiche	Maria Brown	(301) 763-5511

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C21 - New Residential Construction in Selected Standard Metropolitan Statistical Areas

C22 - Housing Completions

C25 - Sales of New One-Family Houses

C27 - Price Index of New One-Family Houses Sold

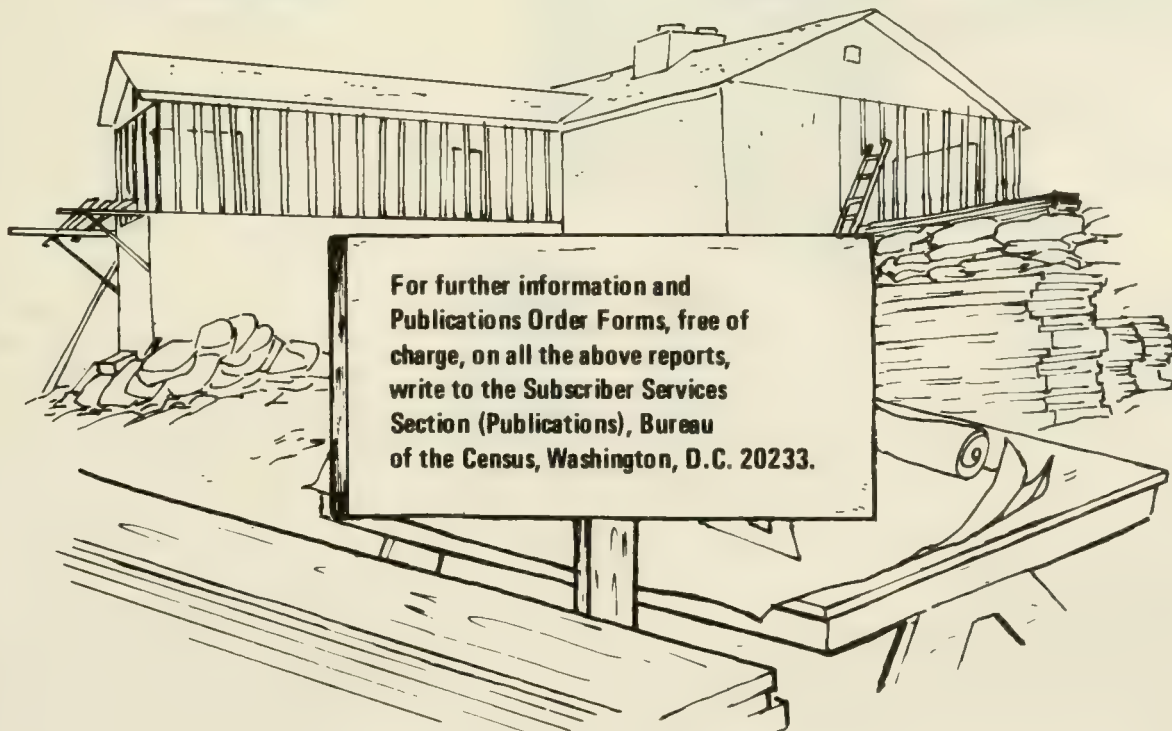
C30 - Value of New Construction Put in Place

C40 - Housing Authorized by Building Permits and Public Contracts

C41 - Authorized Construction—Washington, D.C. Area

C45 - Permits Issued for Demolition of Residential Structures in Selected Cities

C50 - Expenditures on Residential Additions, Alterations, Maintenance and Repairs, and Replacements



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3, 158:

Flour Milling Products



U.S. Department of Commerce
BUREAU OF THE CENSUS

MARCH 1980

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Issued June 1980

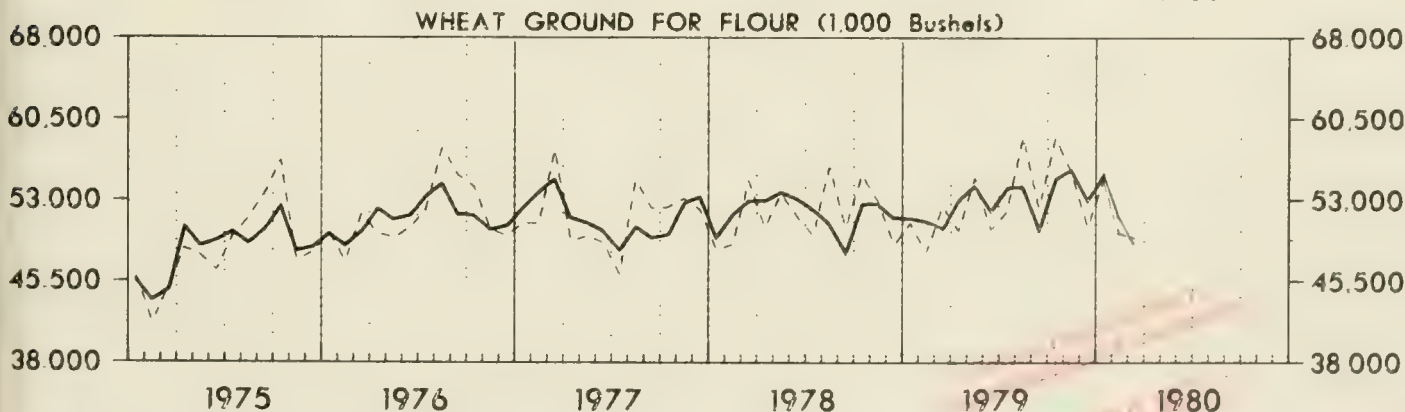
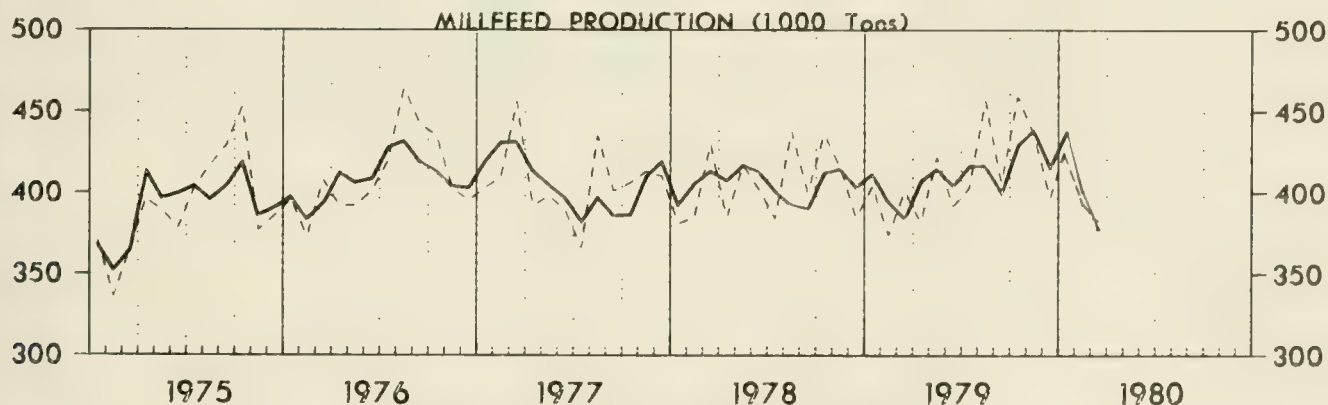
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING 1975 TO 1980

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Gina M. Pagano, (301) 763-7837.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1980			
March.....	1,034	377	48,212
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1980								
March (21 days).....	1,046	21,970	382,137	48,861	3,323	1,059	98.8	74.9
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,136	22,739	396,985	50,530	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
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December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days).....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September (20 days).....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August (23 days).....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July (20 days).....	1,117	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June (22 days).....	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5
May (22 days).....	1,094	24,078	417,032	53,601	(NA)	1,039	105.3	74.5
April (20 days).....	1,127	22,554	385,227	50,478	(NA)	1,039	108.5	74.5
March (23 days).....	1,057	24,330	430,260	54,821	4,096	1,039	101.8	73.8
February (20 days).....	1,086	21,783	385,269	48,910	(NA)	1,077	100.9	74.2

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	March 1980	February 1980	March 1979
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	3,320	2,894	3,860
20411 55	Straight semolina durum flour.....	M cwt.....	1,480	1,373	1,761
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	274	283	340
20416 18	Rye flour production....	M cwt.....	125	126	14
20416 11	Rye millfeed production.....	Tons.....	1,261	1,561	1,958
	Rye flour stocks ¹	M cwt.....	22	15	21
	24 hour capacity.....	..do.....	11	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	March 1980		February 1980		March 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	48,861	21,970	50,352	22,624	52,454	23,454
Middle Atlantic.....	6,411	2,890	6,523	2,945	7,060	3,169
New York.....	5,073	2,286	4,936	2,239	5,793	2,611
North Central.....	25,420	11,398	26,483	11,882	27,515	12,285
Ohio.....	2,990	1,332	2,915	1,293	3,152	1,387
Indiana.....	1,332	579	1,054	455	1,300	562
Illinois.....	2,866	1,279	3,077	1,348	2,983	1,322
Michigan.....	859	376	851	375	935	412
Minnesota.....	6,302	2,853	5,919	2,686	5,526	2,500
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,093	1,426	3,270	1,485	3,860	1,735
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	4,847	2,193	5,886	2,672	6,061	2,750
South Atlantic.....	3,417	1,496	3,664	1,617	3,343	1,457
East South Central.....	2,426	1,070	2,457	1,078	2,775	1,307
Tennessee.....	1,855	815	1,873	823	2,113	1,020
West South Central.....	3,531	1,604	3,775	1,712	3,454	1,552
Oklahoma.....	1,513	706	1,565	727	1,352	622
Texas.....	1,468	651	1,676	750	1,507	668
Mountain.....	2,708	1,252	2,584	1,217	2,921	1,337
Montana.....	629	297	648	304	682	309
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,948	2,260	4,866	2,173	5,386	2,347
Washington.....	1,302	591	1,440	650	1,401	639
Oregon.....	887	405	795	365	1,012	456
California and Hawaii.....	2,759	1,264	2,631	1,158	2,973	1,252

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	February 1980	January 1980	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	293	75	368
Dominican Republic.....	5	1	6
Honduras.....	-	3	3
Guatemala.....	-	1	1
Colombia.....	-	-	-
Ecuador.....	-	-	-
Peru.....	18	2	20
Brazil.....	1	1	2
Bolivia.....	11	-	11
Chile.....	41	15	56
Morocco.....	66	11	77
Egypt.....	11	23	34
Israel.....	30	-	30
Jordan.....	-	2	2
India.....	-	2	2
Sri Lanka.....	48	-	48
Somalia.....	11	1	12
Philippines.....	42	-	42
Other.....	9	13	22
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	1,300	1,018	2,318
Canada.....	7	4	11
Mexico.....	4	4	8
Bahamas.....	4	7	11
Jamaica.....	16	3	19
Honduras.....	-	-	-
Nicaragua.....	-	-	-
Colombia.....	5	1	6
Peru.....	-	-	-
Brazil.....	-	-	-
Bolivia.....	-	27	27
Surinam.....	4	25	29
Iceland.....	9	-	9
Morocco.....	-	-	-
Egypt.....	1,070	675	1,745
Jordan.....	1	-	1
Lebanon.....	-	-	-
Saudi Arabia.....	148	230	378
United Arab Emirates.....	2	14	16
India.....	1	-	1
Sri Lanka.....	-	-	-
Korean Republic.....	-	-	-
Philippines.....	-	-	-
Other.....	29	28	57
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	89,513	82,667	172,180
Mexico.....	2,079	4,579	6,658
Jamaica.....	-	50	50
Haiti.....	-	598	598
Honduras.....	155	69	224
El Salvador.....	-	184	184
Costa Rica.....	215	441	656
Panama.....	107	315	422
Venezuela.....	783	2,526	3,309
Colombia.....	3,304	3,445	6,749
Ecuador.....	955	1,722	2,677
Peru.....	1,072	895	1,967
Brazil.....	3,087	1,517	4,604
Bolivia.....	-	979	979
Chile.....	3,105	996	4,101
Surinam.....	-	159	159
Portugal.....	1,091	2,314	3,405
German Democratic Republic.....	-	1,725	1,725
Poland.....	-	1,076	1,076
U.S.S.R.....	4,332	12,240	16,572
Morocco.....	760	2,203	2,963
Egypt.....	6,493	7,447	13,940
Israel.....	-	1,102	1,102
Iraq.....	1,903	522	2,425
Iran.....	-	-	-
Pakistan.....	587	2,058	2,645
Bangladesh.....	5,873	1,110	6,983
China (Mainland).....	6,541	1,176	7,717
Korean Republic.....	6,497	7,001	13,498
Indonesia.....	3,645	3,621	7,266
Philippines.....	1,025	1,918	2,943
Nigeria.....	4,115	2,490	6,605
Other.....	31,789	16,189	47,978

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
FEBRUARY 1980						
Wheat flour.....	22,624	(NA)	1,593	19,423	7.0	(NA)
JANUARY 1980						
Wheat flour.....	24,654	(NA)	1,093	13,858	4.4	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	-

(NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, **Flour Milling Products**. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501, effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

d. *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

h. *Geographic Area of Coverage*—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report	Gina Pagano	(301) 763-7837
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
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World Population 1977

Recent Demographic Estimates for the Countries and Regions of the World

Of every 10 people in the world today, four live in either China or India. Add the Soviet Union and the United States, and half the World's population is covered. The other half of the world's people are distributed among the remaining 196 countries and territories. Throughout the world, a perceptible decline in population growth rates has begun to emerge, with the persistent exception of Africa. In some areas the decrease is substantial, in others incipient; in general the decrease is no longer questionable. Over 70 percent of the world's population lives in countries where the growth rate was lower in 1976 than in 1966.



This publication presents reported and estimated demographic data for the 200 countries of the world with a population of at least 5,000 persons, and for world regions. Benchmark, or hard, data for each country include the enumerated and adjusted population from the latest census or survey, birth and death rates, annual rate of growth, life expectancy at birth, infant mortality rate, percent of population under age 15, median age of mother, median birth order, percent urban, and percent of labor force in agriculture. A projected estimate of the population of each country for 1977 as well as birth and death rates and the annual rate of growth for 1976 are shown. All benchmark data and projected estimates are annotated, and major sources are listed. Also included for each country are population figures for each census taken since 1950, and an annual series of population estimates for the years 1950 to 1977.

This report was prepared under a Resources Support Services Agreement with the Development Support Bureau, U.S. Agency for International Development.

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3,158:

Flour Milling Products



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APRIL 1980

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Issued June 1980U.S. Department of Commerce
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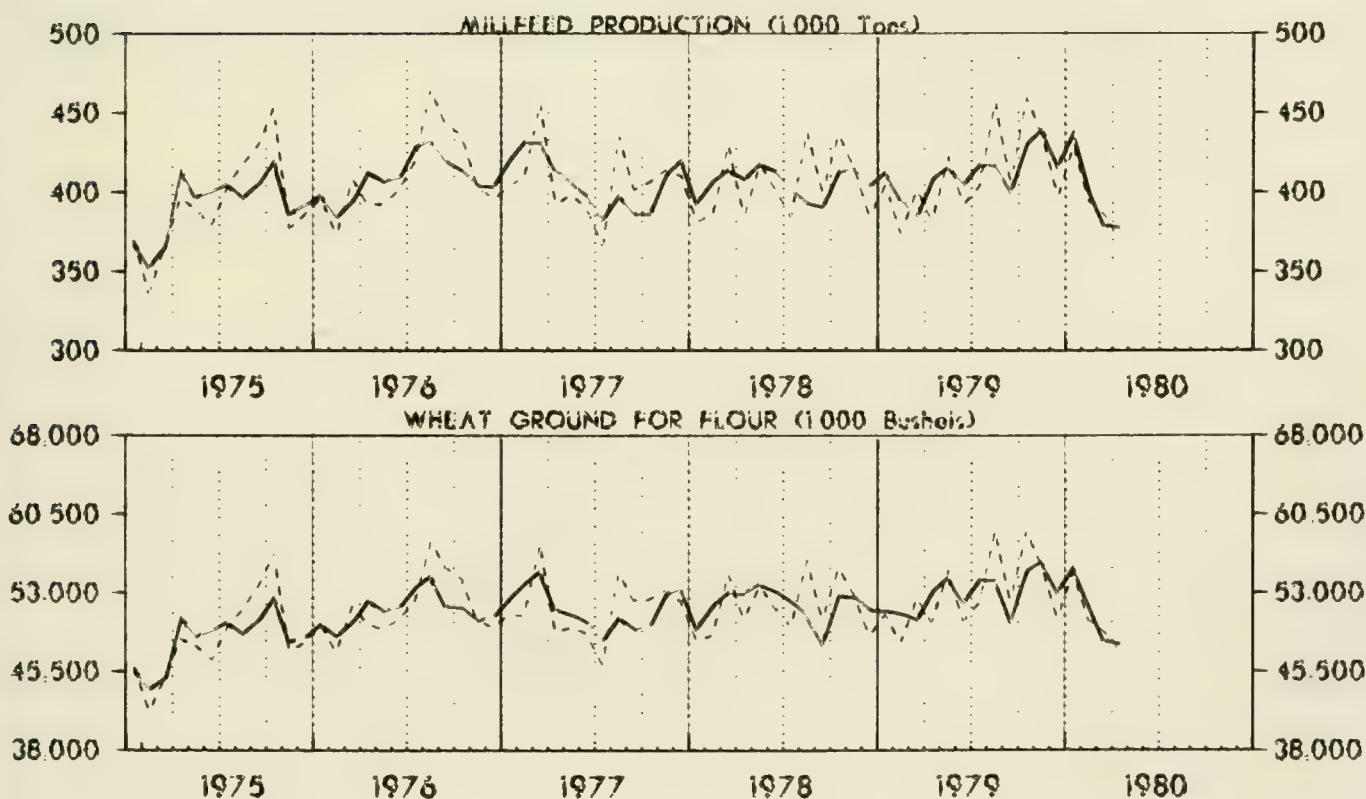
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING
1975 TO 1980

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Gina M. Pagano, (301) 763-1750.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1980			
April.....	1,005	378	48,157
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1980								
April (22 days).....	971	21,359	369,811	47,374	(NA)	1,059	91.7	75.1
March (21 days).....	1,055	22,165	384,383	49,104	3,323	1,059	99.6	75.2
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,136	22,739	396,985	50,530	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.1
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days).....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September (20 days).....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August (23 days).....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July (20 days).....	1,117	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June (22 days).....	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5
May (22 days).....	1,094	24,078	417,032	53,601	(NA)	1,039	105.3	74.5
April (20 days).....	1,127	22,554	385,227	50,478	(NA)	1,039	108.5	74.5

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	April 1980	March 1980	April 1979
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.....	2,336	3,378	3,389
20411 53	Straight semolina durum flour.....	M cwt.....	1,033	1,536	1,532
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.....	248	274	288
20416 11	Rye flour production.....	M cwt.....	114	125	136
20416 18	Rye millfeed production.....	Tons.....	1,296	1,261	1,594
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity.....	..do.....	11	11	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	April 1980		March 1980		April 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	47,374	21,359	49,104	22,165	50,205	22,291
Middle Atlantic.....	6,289	2,824	6,411	2,890	6,590	2,872
New York.....	4,932	2,217	5,073	2,286	5,450	2,365
North Central.....	23,512	10,601	25,336	11,395	26,852	11,890
Ohio.....	2,874	1,260	2,990	1,332	2,656	1,168
Indiana.....	1,295	576	1,332	579	1,228	528
Illinois.....	2,653	1,180	2,866	1,279	2,708	1,216
Michigan.....	788	341	859	375	818	355
Minnesota.....	5,739	2,630	6,302	2,853	5,981	2,618
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,630	1,208	3,093	1,426	3,308	1,507
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,091	2,307	4,847	2,193	6,600	2,988
South Atlantic.....	3,654	1,606	3,419	1,498	3,211	1,404
East South Central.....	2,410	1,059	2,426	1,070	2,418	1,062
Tennessee.....	1,855	810	1,855	815	1,885	831
West South Central.....	3,350	1,519	3,531	1,604	3,705	1,671
Oklahoma.....	1,337	621	1,513	706	1,573	725
Texas.....	1,418	630	1,468	651	1,533	680
Mountain.....	2,798	1,297	2,708	1,252	2,688	1,200
Montana.....	664	310	629	297	592	275
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,361	2,453	^r 5,273	^r 2,456	4,741	2,192
Washington.....	1,457	655	^r 1,291	^r 591	1,309	592
Oregon.....	911	421	^r 1,030	^r 473	939	428
California and Hawaii.....	2,993	1,377	^r 2,952	^r 1,392	2,493	1,172

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies. ^rRevised by 5 percent or more from previously published figures.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	March 1980	February 1980	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	334	293	702
Dominican Republic.....	2	5	7
Honduras.....	-	-	3
Guatemala.....	3	-	4
Colombia.....	-	-	-
Ecuador.....	2	-	2
Peru.....	-	18	20
Brazil.....	1	1	3
Bolivia.....	-	11	11
Chile.....	-	41	56
Morocco.....	135	66	212
Egypt.....	36	11	70
Israel.....	5	30	35
Jordan.....	-	-	2
India.....	5	-	7
Sri Lanka.....	-	48	48
Somalia.....	1	11	12
Philippines.....	98	42	140
Other.....	46	9	70
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	2,713	1,300	5,031
Canada.....	2	7	13
Mexico.....	7	4	15
Bahamas.....	9	4	20
Jamaica.....	13	16	32
Honduras.....	1	-	1
Nicaragua.....	-	-	-
Colombia.....	12	5	18
Peru.....	-	-	-
Brazil.....	-	-	-
Bolivia.....	-	-	27
Surinam.....	2	4	31
Iceland.....	5	9	14
Morocco.....	-	-	-
Egypt.....	1,596	1,070	3,342
Jordan.....	2	1	4
Lebanon.....	4	-	4
Saudi Arabia.....	812	148	1,190
United Arab Emirates.....	6	2	22
India.....	-	1	1
Sri Lanka.....	-	-	-
Korean Republic.....	-	-	-
Philippines.....	3	-	3
Other.....	239	29	294
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	94,730	89,513	266,911
Mexico.....	120	2,079	6,778
Jamaica.....	-	-	50
Haiti.....	-	-	598
Honduras.....	350	155	574
El Salvador.....	395	-	579
Costa Rica.....	-	215	656
Panama.....	-	107	422
Venezuela.....	2,915	783	6,224
Colombia.....	1,483	3,304	8,232
Ecuador.....	930	955	3,607
Peru.....	989	1,072	2,955
Brazil.....	13,893	3,087	18,497
Bolivia.....	-	-	979
Chile.....	1,516	3,105	5,617
Surinam.....	-	-	159
Portugal.....	2,586	1,091	5,991
German Democratic Republic.....	3,472	-	5,197
Poland.....	3,350	-	4,426
U.S.S.R.....	974	4,332	17,546
Morocco.....	2,395	760	5,358
Egypt.....	6,552	6,493	20,492
Israel.....	2,024	-	3,126
Iraq.....	3,897	1,903	6,322
Iran.....	-	-	-
Pakistan.....	40	587	2,685
Bangladesh.....	1,888	5,873	8,871
China (Mainland).....	4,613	6,541	12,330
Korean Republic.....	5,679	6,497	19,177
Indonesia.....	1,176	3,645	8,442
Philippines.....	933	1,025	3,876
Nigeria.....	2,233	4,115	11,838
Other.....	30,327	31,789	78,307

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
MARCH 1980						
Wheat flour.....	22,165	(NA)	3,047	36,271	13.7	(NA)
FEBRUARY 1980						
Wheat flour.....	22,624	(NA)	1,593	19,423	7.0	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	-

(NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, **Flour Milling Products**. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501, effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

d. Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. "Direct" vs "Total" Commodity Export and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as

is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

h. Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

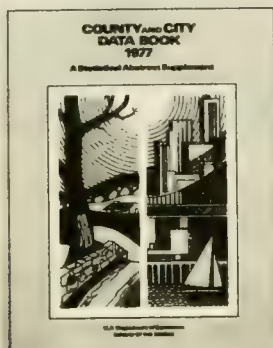
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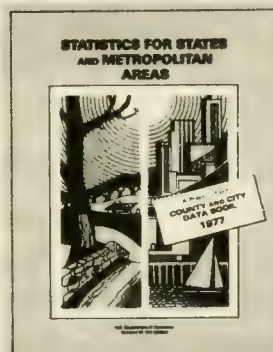
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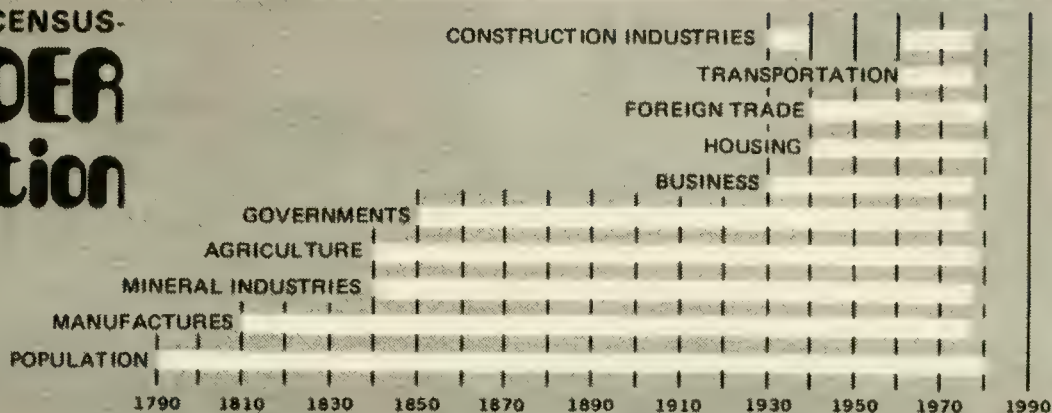
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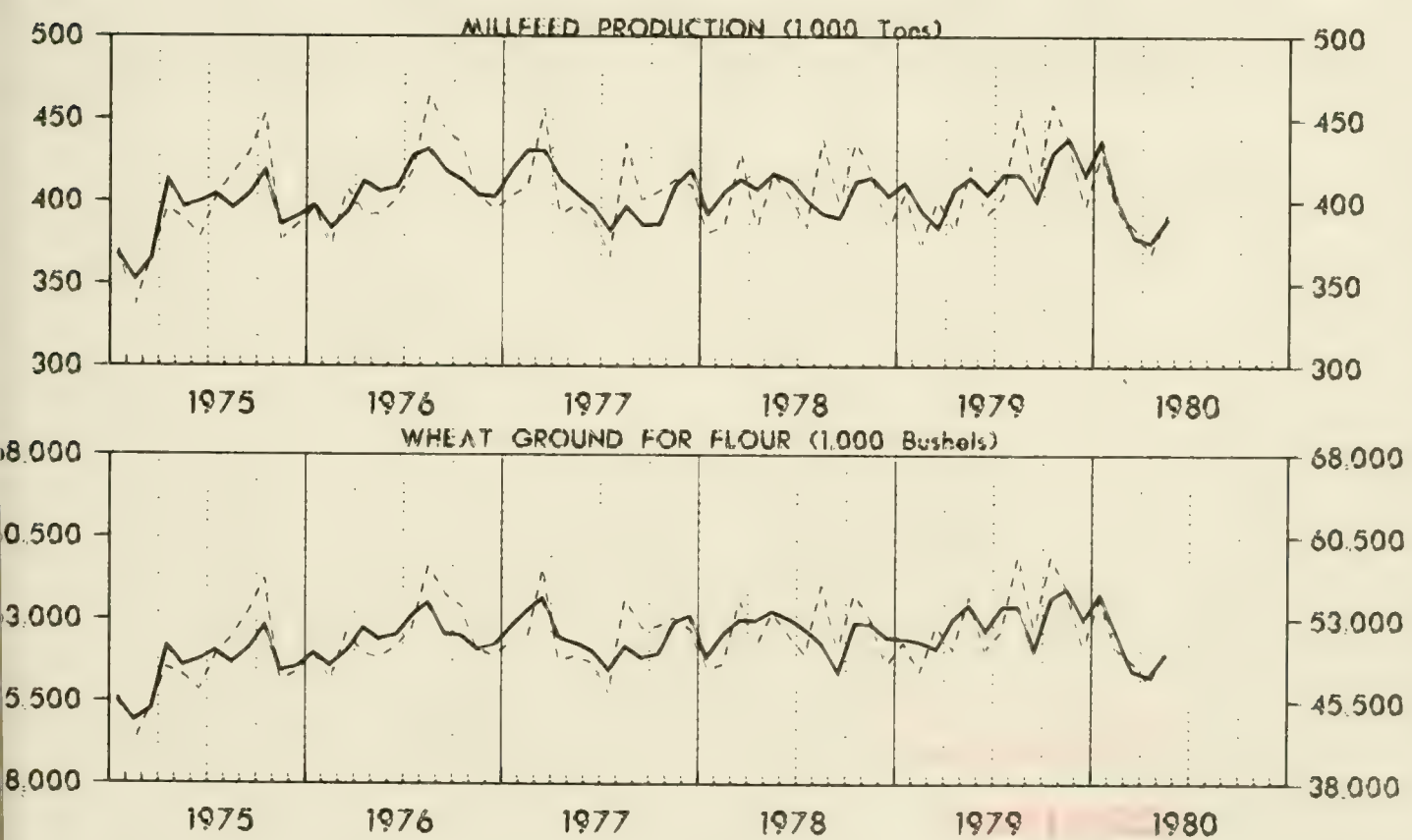
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING. 1975 TO 1980

— Seasonally Adjusted
- - - Not Seasonally Adjusted



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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1980			
May.....	1,080	390	49,914
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	1,124	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1980								
May (21 days).....	1,090	22,880	392,093	50,114	(NA)	1,059	102.9	76.1
April (22 days).....	965	21,231	367,709	47,170	(NA)	1,059	91.1	75.0
March (21 days).....	1,055	22,165	384,383	49,104	3,323	1,059	99.6	75.2
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,136	22,739	396,985	50,530	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.1
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days).....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September (20 days).....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August (23 days).....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July (20 days).....	1,117	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June (22 days).....	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5
May (22 days).....	1,094	24,078	417,032	53,601	(NA)	1,039	105.3	74.5

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	May 1980	April 1980	May 1979
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,721	2,336	3,179
20411 55	Straight semolina durum flour.....	M cwt.....	1,196	1,033	1,429
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	283	248	278
20416 18	Rye flour production.....	M cwt.....	127	114	123
20416 11	Rye millfeed production.....	Tons.....	1,508	1,296	1,510
	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity.....	..do.....	11	11	16

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	May 1980		April 1980		May 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	50,114	22,880	47,170	21,231	55,093	24,573
Middle Atlantic.....	6,957	3,325	6,254	2,824	7,359	3,334
New York.....	5,451	2,382	4,932	2,217	5,910	2,086
North Central.....	25,348	11,357	23,376	10,508	29,104	12,983
Ohio.....	2,751	1,225	2,631	1,164	2,834	1,254
Indiana.....	1,236	538	1,295	576	1,227	522
Illinois.....	2,897	1,280	2,653	1,180	3,383	1,418
Michigan.....	797	343	788	341	886	386
Minnesota.....	5,557	2,519	5,778	2,611	6,014	2,736
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,744	1,254	2,630	1,208	3,466	1,588
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,998	2,736	5,091	2,307	7,224	3,273
South Atlantic.....	3,732	1,660	3,654	1,605	3,524	1,536
East South Central.....	2,473	1,093	2,410	1,059	2,747	1,209
Tennessee.....	1,922	849	1,855	810	2,129	940
West South Central.....	3,709	1,691	3,350	1,518	3,875	1,733
Oklahoma.....	1,627	755	1,337	621	1,559	719
Texas.....	1,571	706	1,418	629	1,773	770
Mountain.....	2,578	1,189	2,798	1,297	3,028	1,386
Montana.....	594	276	664	310	678	306
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,317	2,565	5,328	2,420	5,456	2,392
Washington.....	1,564	707	1,457	655	1,421	643
Oregon.....	931	423	867	400	923	418
California and Hawaii.....	2,822	1,354	3,004	1,377	3,112	1,331

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.
published figures.

^rRevised by 5 percent or more from previously

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	April 1980	March 1980	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	167	334	869
Dominican Republic.....	-	2	7
Honduras.....	-	-	3
Guatemala.....	-	3	4
Colombia.....	-	-	-
Ecuador.....	-	2	2
Peru.....	12	-	32
Brazil.....	-	1	3
Bolivia.....	11	-	22
Chile.....	25	-	81
Morocco.....	23	135	235
Egypt.....	28	36	98
Israel.....	-	5	35
Jordan.....	-	-	2
India.....	16	5	23
Sri Lanka.....	-	-	48
Somalia.....	3	1	15
Philippines.....	41	98	181
Other.....	8	46	78
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	867	2,713	5,898
Canada.....	2	2	15
Mexico.....	2	7	17
Bahamas.....	6	9	26
Jamaica.....	73	13	105
Honduras.....	-	1	1
Nicaragua.....	-	-	-
Colombia.....	9	12	27
Peru.....	-	-	-
Brazil.....	52	-	52
Bolivia.....	-	-	27
Surinam.....	5	2	36
Iceland.....	2	5	16
Morocco.....	-	-	-
Egypt.....	63	1,596	3,405
Jordan.....	-	2	4
Lebanon.....	-	4	4
Saudi Arabia.....	334	812	1,524
United Arab Emirates.....	15	6	37
India.....	-	-	1
Sri Lanka.....	-	-	-
Korean Republic.....	-	-	-
Philippines.....	19	3	22
Other.....	285	239	579
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	98,322	94,730	365,232
Mexico.....	15	120	6,793
Jamaica.....	-	-	50
Haiti.....	-	-	598
Honduras.....	110	350	684
El Salvador.....	-	395	579
Costa Rica.....	478	-	1,134
Panama.....	387	-	809
Venezuela.....	431	2,915	6,655
Colombia.....	1,077	1,483	9,309
Ecuador.....	729	930	4,336
Peru.....	3,684	989	6,639
Brazil.....	13,020	13,893	31,517
Bolivia.....	907	-	1,886
Chile.....	2,807	1,516	8,424
Surinam.....	-	-	159
Portugal.....	1,086	2,586	7,077
German Democratic Republic.....	-	3,472	5,197
Poland.....	-	3,350	4,426
U.S.S.R.....	-	-	17,546
Morocco.....	555	2,395	5,913
Egypt.....	3,588	6,552	24,080
Israel.....	1,241	2,024	4,367
Iraq.....	2,657	3,897	8,979
Iran.....	-	-	-
Pakistan.....	-	40	2,685
Bangladesh.....	7,759	1,888	16,630
China (Mainland).....	3,733	4,613	16,063
Korean Republic.....	5,122	5,679	24,299
Indonesia.....	2,226	1,176	10,668
Philippines.....	3,888	933	7,764
Nigeria.....	3,331	2,233	12,169
Other.....	39,491	30,327	117,797

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
APRIL 1980						
Wheat flour.....	21,231	(NA)	1,034	12,713	4.9	(NA)
MARCH 1980						
Wheat flour.....	22,165	(NA)	3,047	36,271	13.7	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	-

(NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, **Flour Milling Products**. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. **Duplication in Quantity and Value of Output**—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. **Low-Valued Export and Import Transactions**—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501, effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

d. **Manufacturers' Shipments, Not Specified by Kind**—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. **Time Lag Between Output and Exports**—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. **"Direct" vs "Total" Commodity Export and Imports**—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. **Used Commodities**—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

h. **Geographic Area of Coverage**—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

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Subject	Tabular Detail	Areas to Which Data Apply	Frequency	Sources
Employment Patterns Place of work and residence - Workers by race - Con	Rank by proportion of Blacks in central city, 1970 Total employed Percent of races other than white in central city Outside central city	20 SMSA's	Annual	186 Current Population Reports: The Social and Economic Status of Negroes in the United States, 1970 P 21 N, 38 table 5-1 (also see values) Census Bureau
Unemployed Persons Last occupation	Experienced unemployed ** 16 years old and over Total Black Span in her age By sex Occupation last worked in 8 categories	SMSA's central cities urban places unincorporated areas, counties, cities of 10,000 or more	years ending in 2	87 Population Census, 1970, Parts 2 to 52 and individual State reports, tables 88-98, 100, 106, 127 Census Bureau
Last year worked	Experienced workers not in labor force, 16 years old and over Year last worked in 3 time spans By sex In 84 to 180 occupation groups in 92 industry groups Population 14 years old and over not in labor force Total Black Span in her age By sex In 13 age groups Total last worked 1960 to 1970 Percent not in labor force during 5 year last worked during 5 time spans Did not work 1960 to 1970 Total never worked Year last worked before 1960 Year last worked not reported	SMSA's of 250,000 or more SMSA's of 250,000 or more those with at least 400 Blacks or people of Span in her age	years ending in 2	88 Population Census, 1970, Parts 2 to 52 and individual State reports, table 168 Census Bureau
Trends in Unemployment	Unemployment areas Substantial persistent	150 major labor areas	Monthly	296 Area Trends in Employment and Unemployment, May 1976, 14 (also 14-18) (also 14-18) (also 14-18) Employment and Training Administration

** includes people who last worked more than 10 years ago
** Data for total population only in counties and in places of 10,000 to 90,000

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3. 158

Flour Milling Products



U.S. Department of Commerce
BUREAU OF THE CENSUS

JUNE 1980

M20A(80)-6
Issued August 1980

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

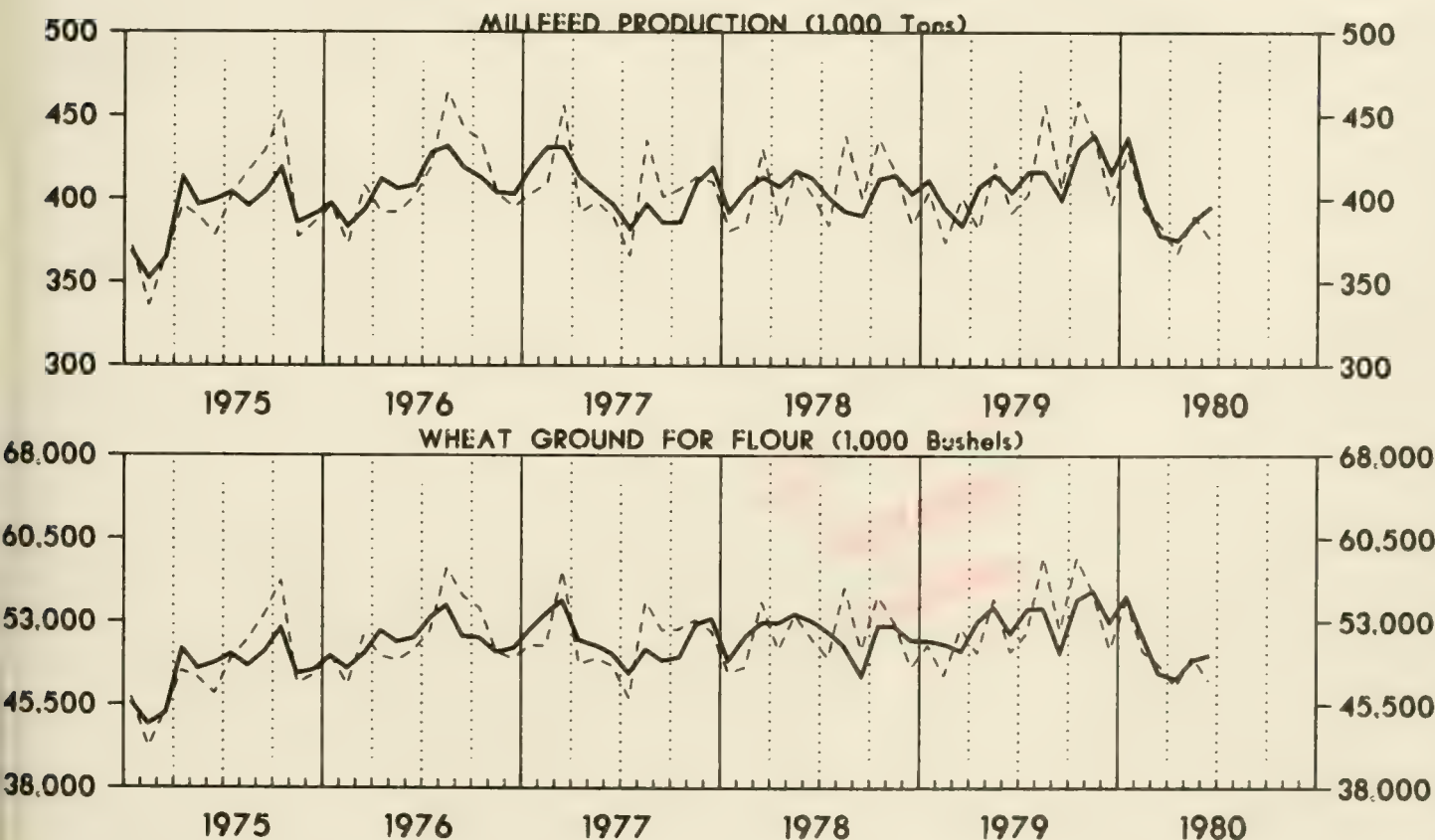
reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING:
1975 TO 1980

M 20 A (80)-6

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Gina M. Pagano, (301) 763-1750.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1980			
June.....	1,158	396	50,083
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	1,124	401	52,176
June.....	1,124	413	53,196

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1980								
June (21 days).....	1,111	23,325	376,070	47,702	4,268	1,056	105.2	81.5
May (21 days).....	1,086	22,814	390,185	49,836	(NA)	1,059	102.5	76.3
April (22 days).....	965	21,231	367,709	47,170	(NA)	1,059	91.1	75.0
March (21 days).....	1,055	22,165	384,383	49,104	3,323	1,059	99.6	75.2
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,136	22,739	396,985	50,530	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.1
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days).....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September (20 days).....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August (23 days).....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July (20 days).....	1,117	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June (22 days).....	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	June 1980	May 1980	June 1979
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,706	2,721	2,417
20411 55	Straight semolina durum flour.....	M cwt.....	1,145	1,193	1,059
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	262	283	299
20416 18	Rye flour production.....	M cwt.....	118	127	129
20416 11	Rye millfeed production.....	Tons.....	1,231	1,508	1,785
	Rye flour stocks ¹	M cwt.....	12	(NA)	50
	24 hour capacity.....	..do.....	11	11	16

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	June 1980		May 1980		June 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	47,702	23,325	49,836	22,814	50,138	22,536
Middle Atlantic.....	6,684	2,962	6,844	3,325	6,471	2,926
New York.....	5,219	2,337	5,294	2,382	5,308	2,405
North Central.....	24,171	12,762	25,431	11,441	27,037	12,227
Ohio.....	2,341	1,031	2,751	1,225	2,473	1,097
Indiana.....	1,402	2,536	1,236	538	1,477	618
Illinois.....	2,713	1,193	2,897	1,280	2,906	1,282
Michigan.....	774	336	801	346	772	336
Minnesota.....	5,469	2,467	5,557	2,519	5,573	2,565
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,641	1,219	2,744	1,254	3,331	1,528
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,840	2,641	5,998	2,736	6,869	3,127
South Atlantic.....	3,454	1,504	3,723	1,643	2,985	1,302
East South Central.....	2,362	1,017	2,473	1,133	2,264	993
Tennessee.....	1,821	781	1,922	889	1,745	767
West South Central.....	3,595	1,637	^r 3,470	^r 1,599	3,709	1,665
Oklahoma.....	1,543	716	^r 1,393	^r 649	1,587	733
Texas.....	1,423	642	1,566	720	1,484	650
Mountain.....	2,524	1,167	2,578	1,189	2,948	1,350
Montana.....	527	248	594	276	552	256
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,912	2,276	5,317	2,484	4,724	2,073
Washington.....	1,284	582	1,564	707	1,193	539
Oregon.....	893	400	931	423	769	347
California and Hawaii.....	2,735	1,294	2,822	1,354	2,762	1,187

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies. ^rRevised by 5 percent or more from previously published figures.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	May 1980	April 1980	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	191	167	1,060
Dominican Republic.....	-	-	7
Honduras.....	3	-	6
Guatemala.....	2	-	6
Colombia.....	-	-	-
Ecuador.....	-	-	2
Peru.....	19	12	51
Brazil.....	-	-	3
Bolivia.....	-	11	22
Chile.....	-	25	81
Morocco.....	86	23	321
Egypt.....	4	28	102
Israel.....	-	-	35
Jordan.....	3	-	5
India.....	-	16	23
Sri Lanka.....	-	-	48
Somalia.....	-	3	15
Philippines.....	60	41	241
Other.....	14	8	92
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	918	867	6,816
Canada.....	1	2	16
Mexico.....	-	2	17
Bahamas.....	5	6	31
Jamaica.....	37	73	142
Honduras.....	-	-	2
Nicaragua.....	-	-	-
Colombia.....	-	9	27
Peru.....	-	-	-
Brazil.....	-	52	52
Bolivia.....	-	-	27
Surinam.....	15	5	51
Iceland.....	2	2	18
Morocco.....	-	-	-
Egypt.....	521	63	3,926
Jordan.....	-	-	4
Lebanon.....	1	-	5
Saudi Arabia.....	298	334	1,822
United Arab Emirates.....	2	15	39
India.....	-	-	1
Sri Lanka.....	-	-	-
Korean Republic.....	-	-	-
Philippines.....	-	19	22
Other.....	36	285	614
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	88,579	98,322	453,811
Mexico.....	4	15	6,796
Jamaica.....	138	-	188
Haiti.....	815	-	1,413
Honduras.....	108	110	792
El Salvador.....	472	-	1,051
Costa Rica.....	441	478	1,575
Panama.....	106	387	915
Venezuela.....	1,554	431	8,209
Colombia.....	2,617	1,077	11,925
Ecuador.....	1,047	729	5,382
Peru.....	1,883	3,684	8,522
Brazil.....	8,981	13,020	40,498
Bolivia.....	492	907	2,378
Chile.....	1,469	2,807	9,893
Surinam.....	52	-	211
Portugal.....	2,921	1,086	9,998
German Democratic Republic.....	-	-	5,197
Poland.....	-	-	4,426
U.S.S.R.....	-	-	17,546
Morocco.....	1,109	555	7,022
Egypt.....	808	3,588	24,888
Israel.....	-	1,241	4,367
Iraq.....	831	2,657	9,810
Iran.....	1,837	-	1,837
Pakistan.....	-	-	2,685
Bangladesh.....	8,156	7,759	24,786
China (Mainland).....	566	3,733	16,629
Korean Republic.....	6,623	5,122	30,921
Indonesia.....	-	2,226	10,668
Philippines.....	2,062	3,888	9,826
Nigeria.....	3,744	3,331	15,913
Other.....	39,743	39,491	157,544

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
MAY 1980						
Wheat flour.....	22,814	(NA)	1,109	12,791	4.9	(NA)
APRIL 1980						
Wheat flour.....	21,231	(NA)	1,034	12,713	4.9	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, **Flour Milling Products**. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. **Duplication in Quantity and Value of Output**—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. **Low-Valued Export and Import Transactions**—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501, effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

d. **Manufacturers' Shipments, Not Specified by Kind**—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. **Time Lag Between Output and Exports**—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. **"Direct" vs "Total" Commodity Export and Imports**—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. **Used Commodities**—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as

is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

h. **Geographic Area of Coverage**—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

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CURRENT INDUSTRIAL REPORTS

Flour Milling Products



U.S. Department of Commerce
BUREAU OF THE CENSUS

JULY 1980

M20A(80)-7
Issued September 1980

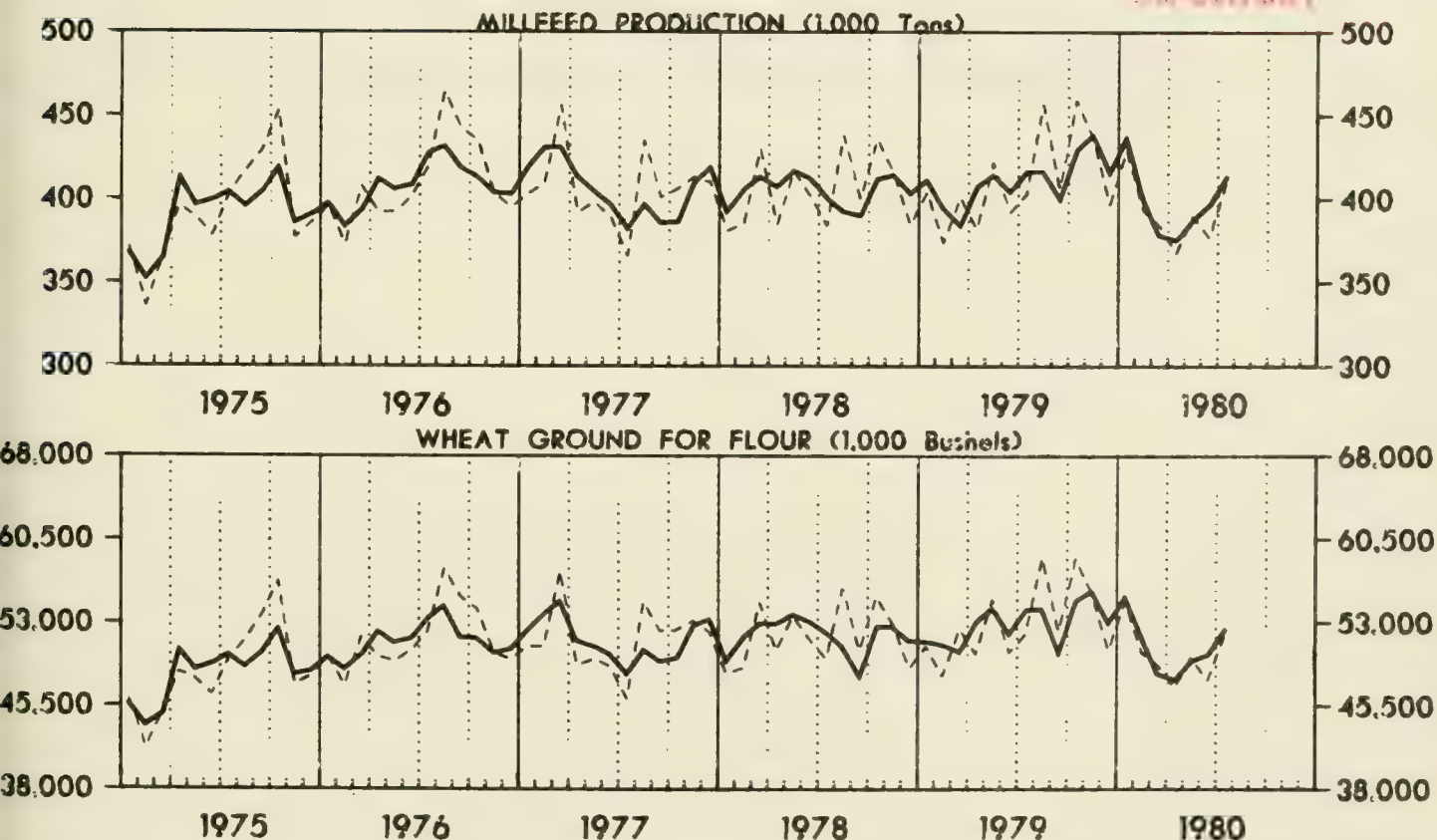
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING, 1975 TO 1980

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Gina M. Pagano, (301) 763-1750.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1980			
July.....	1,110	414	52,438
June.....	^r 1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	1,124	401	52,176
June.....	1,124	413	53,196

^r Revised.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1980								
July (22 days).....	1,054	23,194	409,948	51,868	(NA)	1,056	99.8	74.5
June (21 days).....	^r 1,017	^r 21,356	377,292	47,786	4,268	1,056	^r 96.3	^r 74.5
May (21 days).....	1,086	22,814	390,185	49,836	(NA)	1,059	102.5	76.3
April (22 days).....	965	21,231	367,709	47,170	(NA)	1,059	91.1	75.0
March (21 days).....	1,055	22,165	384,383	49,104	3,323	1,059	99.6	75.2
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,136	22,739	396,985	50,530	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.1
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days).....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September (20 days).....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August (23 days).....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July (20 days).....	1,117	22,335	384,090	49,749	(NA)	1,045	106.9	74.8
June (22 days).....	1,047	23,051	401,878	51,544	3,549	1,045	100.3	74.5

(NA) Not available. ^RRevised by 5 percent or more from previously published figures.¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	July 1980	June 1980	July 1979
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.....	2,214	2,729	2,808
20411 53	Straight semolina durum flour.....	M cwt.....	964	1,160	1,252
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.....	290	262	293
20416 11	Rye flour production.....	M cwt.....	135	118	130
20416 18	Rye millfeed production.....	Tons.....	1,260	1,231	1,639
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity.....	..do.....	12	11	16

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	July 1980		June 1980		July 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	51,868	23,194	47,786	^r 21,356	51,995	23,508
Middle Atlantic.....	6,531	2,943	6,684	2,962	6,349	2,871
New York.....	5,185	2,336	5,219	2,337	5,180	2,351
North Central.....	26,978	12,086	24,171	^r 10,833	28,491	12,670
Ohio.....	2,666	1,160	2,341	1,031	2,996	1,299
Indiana.....	1,462	634	1,402	^r 608	1,466	589
Illinois.....	2,964	1,320	2,713	1,192	3,067	1,354
Michigan.....	735	313	774	336	796	343
Minnesota.....	5,711	2,587	5,469	2,467	5,830	2,634
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,620	1,646	2,641	1,219	3,494	1,588
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,568	2,973	5,840	2,641	6,936	3,115
South Atlantic.....	3,597	1,555	3,454	1,504	3,319	1,446
East South Central.....	2,653	1,159	2,362	1,022	2,670	1,156
Tennessee.....	1,975	866	1,821	786	2,060	897
West South Central.....	3,814	1,723	3,598	1,638	3,735	1,673
Oklahoma.....	1,630	759	1,543	716	1,625	747
Texas.....	1,597	706	1,426	643	1,529	667
Mountain.....	2,789	1,292	2,524	1,167	2,879	1,320
Montana.....	612	284	527	248	607	280
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,506	2,436	4,993	2,230	4,552	2,372
Washington.....	1,493	664	1,284	576	1,348	611
Oregon.....	955	437	907	406	721	329
California and Hawaii.....	3,058	1,335	2,802	1,248	2,483	1,432

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies. ^rRevised by 5 percent or more from previously published figures.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	June 1980	May 1980	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	226	191	1,286
Dominican Republic.....	4	-	11
Honduras.....	-	3	6
Guatemala.....	6	2	12
Colombia.....	-	-	-
Ecuador.....	-	-	2
Peru.....	11	19	62
Brazil.....	-	-	3
Bolivia.....	-	-	22
Chile.....	22	-	103
Morocco.....	-	86	321
Egypt.....	-	4	102
Israel.....	21	-	56
Jordan.....	-	3	5
India.....	-	-	23
Sri Lanka.....	60	-	108
Somalia.....	-	-	15
Philippines.....	10	60	251
Other.....	92	14	184
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	1,606	918	8,422
Canada.....	2	1	18
Mexico.....	6	-	23
Bahamas.....	4	5	35
Jamaica.....	46	37	188
Honduras.....	-	-	2
Nicaragua.....	-	-	-
Colombia.....	18	-	45
Peru.....	-	-	-
Brazil.....	-	-	52
Bolivia.....	22	-	49
Surinam.....	4	15	55
Iceland.....	1	2	19
Morocco.....	-	-	-
Egypt.....	1,010	521	4,936
Jordan.....	-	-	4
Lebanon.....	1	1	6
Saudi Arabia.....	104	298	1,926
United Arab Emirates.....	-	2	39
India.....	-	-	1
Sri Lanka.....	-	-	-
Korean Republic.....	-	-	-
Philippines.....	-	-	22
Other.....	388	36	1,002
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	96,193	88,579	550,004
Mexico.....	101	4	6,897
Jamaica.....	-	138	188
Haiti.....	238	815	1,651
Honduras.....	391	108	1,183
El Salvador.....	494	472	1,545
Costa Rica.....	-	441	1,575
Panama.....	102	106	1,017
Venezuela.....	2,480	1,554	10,689
Colombia.....	2,417	2,617	14,342
Ecuador.....	802	1,047	6,184
Peru.....	3,899	1,883	12,421
Brazil.....	3,307	8,981	43,805
Bolivia.....	482	492	2,860
Chile.....	2,589	1,469	12,482
Surinam.....	54	52	265
Portugal.....	3,379	2,921	13,377
German Democratic Republic.....	-	-	5,197
Poland.....	-	-	4,426
U.S.S.R.....	-	-	17,546
Morocco.....	-	1,109	7,022
Egypt.....	-	808	24,888
Israel.....	-	-	4,367
Iraq.....	-	831	9,810
Iran.....	-	1,837	1,837
Pakistan.....	1,173	-	3,858
Bangladesh.....	7,661	8,156	32,447
China (Mainland).....	19,636	566	36,265
Korean Republic.....	6,487	6,623	37,408
Indonesia.....	3,481	-	14,149
Philippines.....	1,027	2,062	10,853
Nigeria.....	2,609	3,744	18,522
Other.....	33,384	39,743	190,928

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
JUNE 1980						
Wheat flour.....	21,356	(NA)	1,832	20,825	8.6	(NA)
MAY 1980						
Wheat flour.....	22,814	(NA)	1,109	12,791	4.9	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	-

- Represents zero. NA Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, *Flour Milling Products*. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. **Duplication in Quantity and Value of Output**—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. **Low-Valued Export and Import Transactions**—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501, effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

d. **Manufacturers' Shipments, Not Specified by Kind**—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. **Time Lag Between Output and Exports**—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. **"Direct" vs "Total" Commodity Exports and Imports**—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. **Used Commodities**—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as

is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

h. **Geographic Area of Coverage**—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report	Gina Pagano	(301) 763-1750
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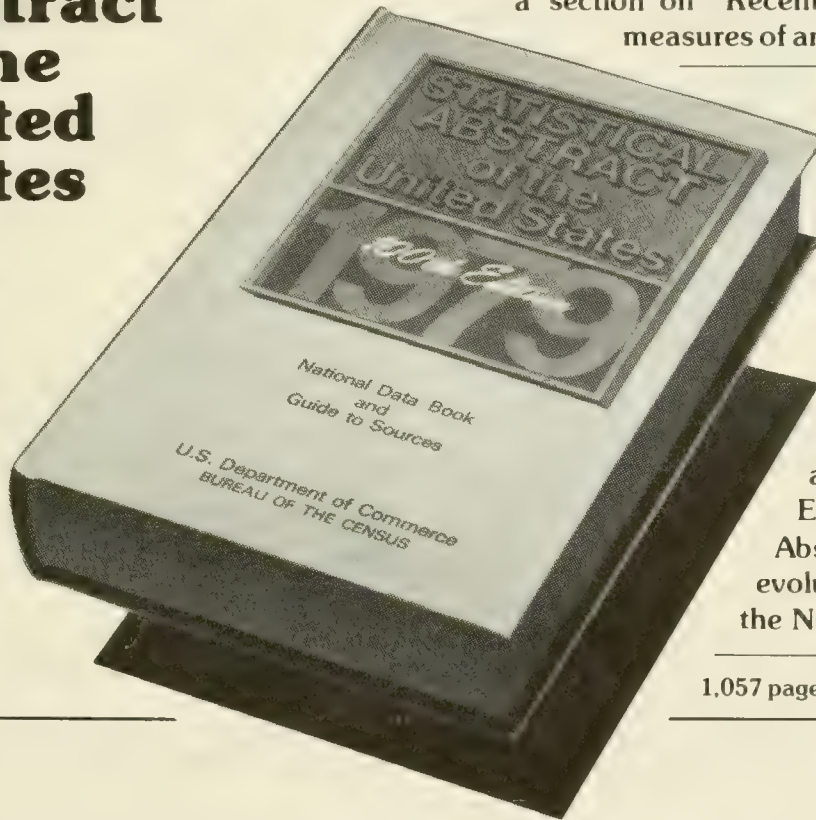
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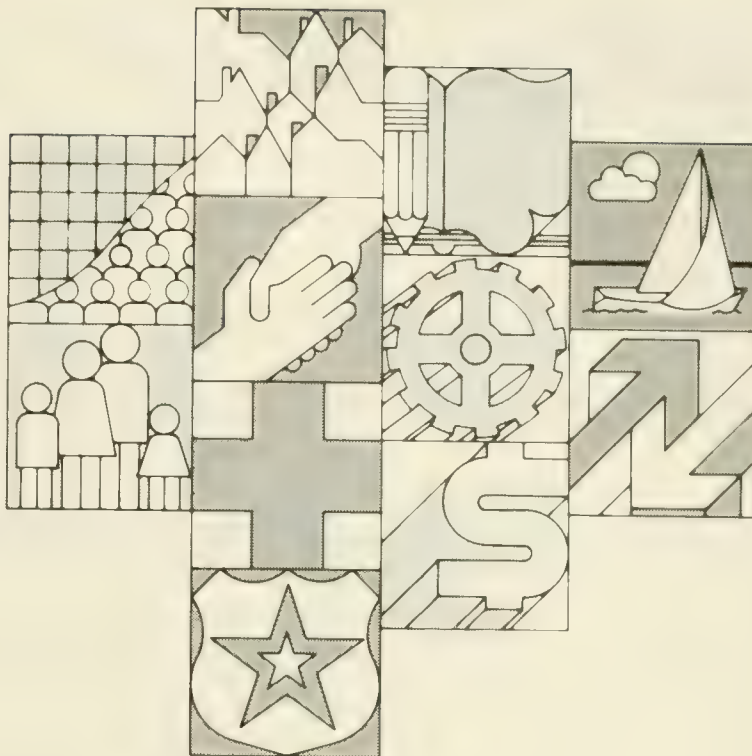
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Flour Milling Products



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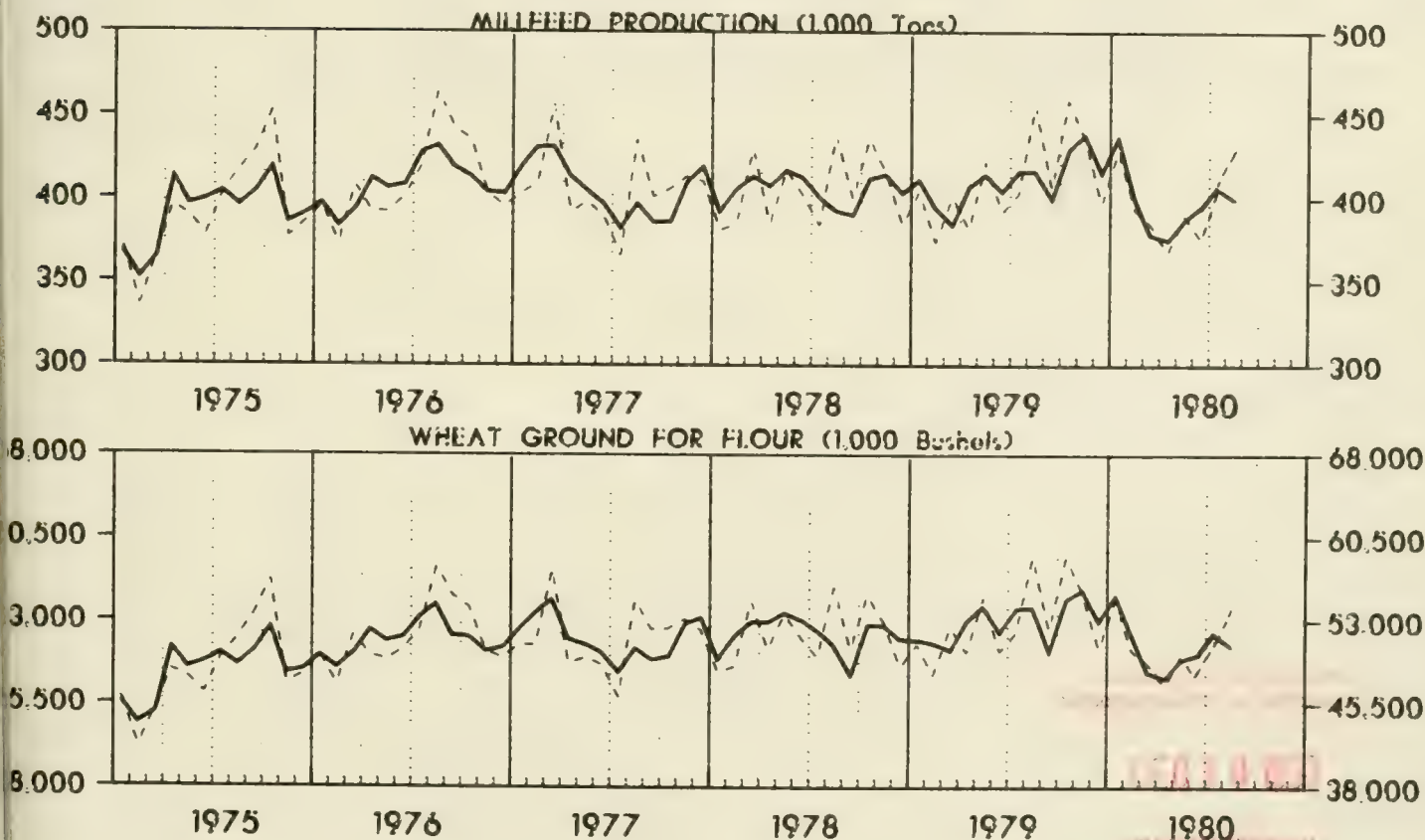
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING 1975 TO 1980

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Anna M. Pagano, (301) 763-1750.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1980			
August....	1,096	401	50,609
July.....	1,108	411	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February....	1,061	462	51,901
January.....	1,163	438	55,454
1979			
December....	1,116	417	53,134
November....	1,162	439	55,922
October.....	1,107	430	55,082
September....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,045	385	50,453
February....	1,084	395	51,051
January....	1,080	412	51,348
1978			
December....	1,086	404	51,457
November....	1,093	415	52,728
October.....	1,084	412	52,176
September....	1,043	390	46,147
August.....	1,087	393	50,886
July.....	1,124	401	52,176

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1980								
August (21 days).....	1.150	24.161	428,001	53.460	(NA)	1.056	108.9	75.3
July (22 days).....	1.052	23.137	409,644	51.760	(NA)	1.056	99.6	74.5
June (21 days).....	1.017	21.356	377,292	47.786	4,268	1.056	96.3	74.5
May (21 days).....	1.086	22.814	390,185	49.836	(NA)	1.059	102.5	76.3
April (22 days).....	965	21.231	367,709	47.170	(NA)	1.059	91.1	75.0
March (21 days).....	1.055	22.165	384,383	49,104	3,323	1.059	99.6	75.2
February (21 days).....	1.077	22.624	394,095	50,352	(NA)	1.059	101.7	74.9
January (22 days).....	1.116	24.553	429,495	54,955	(NA)	1.059	105.4	74.5
1979								
December (20 days).....	1.136	22.739	396,985	50,530	3,975	1.059	107.3	75.0
November (21 days).....	1.180	24.778	435,838	55,586	(NA)	1.050	118.0	74.3
October (23 days).....	1.136	26,137	458,795	58,772	(NA)	1.050	108.2	74.1
September (19 days).....	1.225	23,280	407,341	52,258	3,813	1.050	116.7	74.3
August (23 days).....	1.145	26,334	456,627	58,874	(NA)	1.050	109.1	74.6
July (21 days).....	1.119	23,508	403,133	51.995	(NA)	1.050	106.6	75.4
June (22 days).....	1.073	22.536	391,196	50,138	3,895	1.050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1.057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days).....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September (20 days).....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August (23 days).....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4
July (20 days).....	1,117	22,335	384,090	49,749	(NA)	1,045	106.9	74.8

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	August 1980	July 1980	August 1979
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.....	3.187	2,174	+144
20411 53	Straight semolina durum flour.....	M cwt.....	1.384	947	1.872
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.....	273	r 306	306
20416 11	Rye flour production.....	M cwt.....	125	140	137
20416 18	Rye millfeed production.....	Tons.....	1.310	r 1.367	1.54
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity.....	..do.....	11	11	11

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available. ^rRevised by 5 percent or more from previously published figure.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels, wheat flour production in thousands of hundredweight)

Geographic area	August 1980		July 1980		August 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	53,460	24,161	51,760	23,137	58,874	26,334
Middle Atlantic.....	7,054	3,178	6,508	2,933	7,657	3,466
New York.....	5,443	2,453	5,162	2,326	6,114	2,783
North Central.....	28,120	12,684	26,795	11,999	31,953	14,259
Ohio.....	2,841	1,252	2,666	1,160	3,327	1,460
Indiana.....	1,340	585	1,462	634	1,433	609
Illinois.....	3,277	1,452	2,964	1,320	3,623	1,606
Michigan.....	774	340	735	313	950	401
Minnesota.....	6,168	2,814	5,711	2,587	6,917	3,160
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,457	1,569	3,533	1,604	3,755	1,697
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,491	2,927	6,475	2,928	7,354	3,319
South Atlantic.....	3,977	1,756	3,646	1,573	3,843	1,669
East South Central.....	2,738	1,208	2,712	1,186	2,895	1,265
Tennessee.....	2,131	949	2,034	893	2,226	983
West South Central.....	3,693	1,596	3,801	1,718	4,078	1,835
Oklahoma.....	1,517	705	1,630	759	1,646	761
Texas.....	1,621	644	1,597	706	1,793	791
Mountain.....	2,923	1,351	2,789	1,292	3,065	1,457
Montana.....	679	317	612	284	648	342
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,955	2,388	5,509	2,436	5,383	2,383
Washington.....	1,421	632	1,493	664	1,499	678
Oregon.....	937	439	955	437	751	338
California and Hawaii.....	2,597	1,317	3,061	1,335	3,133	1,367

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	July 1980	June 1980	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	12	226	1,298
Dominican Republic.....	-	4	11
Honduras.....	-	-	6
Guatemala.....	1	6	13
Colombia.....	-	-	-
Ecuador.....	-	-	2
Peru.....	-	11	62
Brazil.....	-	-	3
Bolivia.....	-	-	22
Chile.....	-	22	103
Morocco.....	-	-	321
Egypt.....	-	-	102
Israel.....	7	21	63
Jordan.....	-	-	5
India.....	-	-	23
Sri Lanka.....	-	60	108
Somalia.....	-	-	15
Philippines.....	-	10	251
Other.....	4	92	188
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	894	1,606	9,316
Canada.....	3	2	21
Mexico.....	58	6	81
Bahamas.....	7	4	42
Jamaica.....	57	46	245
Honduras.....	-	-	2
Nicaragua.....	-	-	-
Colombia.....	1	18	46
Peru.....	-	-	-
Brazil.....	-	-	52
Bolivia.....	6	22	55
Surinam.....	6	4	61
Iceland.....	3	1	22
Morocco.....	-	-	-
Egypt.....	679	1,010	5,615
Jordan.....	-	-	4
Lebanon.....	2	1	8
Saudi Arabia.....	17	104	1,943
United Arab Emirates.....	3	-	42
India.....	-	-	1
Sri Lanka.....	-	-	-
Korean Republic.....	-	-	-
Philippines.....	-	-	22
Other.....	52	388	1,054
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	123,589	96,193	673,593
Mexico.....	1,483	101	8,380
Jamaica.....	-	-	188
Haiti.....	194	238	1,845
Honduras.....	-	391	1,183
El Salvador.....	782	494	2,327
Costa Rica.....	411	-	1,986
Panama.....	431	102	1,448
Venezuela.....	1,498	2,480	12,187
Colombia.....	1,482	2,417	15,824
Ecuador.....	1,221	802	7,405
Peru.....	2,024	3,899	14,445
Brazil.....	8,059	3,307	51,864
Bolivia.....	819	482	3,679
Chile.....	4,911	2,589	17,393
Surinam.....	50	54	315
Portugal.....	2,229	3,379	15,606
German Democratic Republic.....	905	-	6,102
Poland.....	-	-	4,426
U.S.S.R.....	-	-	17,546
Morocco.....	733	-	6,646
Egypt.....	3,874	-	28,762
Israel.....	1,990	-	6,357
Iraq.....	-	-	9,810
Iran.....	-	-	1,837
Pakistan.....	370	1,173	4,228
Bangladesh.....	5,967	7,661	38,414
China (Mainland).....	31,691	19,636	67,956
Korean Republic.....	5,840	6,487	43,248
Indonesia.....	919	3,481	15,068
Philippines.....	2,896	1,027	13,749
Nigeria.....	3,818	2,609	22,340
Other.....	38,992	33,384	231,029

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
JULY 1980						
Wheat flour.....	23,137	(NA)	906	9,826	3.9	(NA)
JUNE 1980						
Wheat flour.....	21,356	(NA)	1,832	20,825	8.6	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	

(NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, *Flour Milling Products*. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501, effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

d. *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. *"Direct" vs "Total" Commodity Exports and Imports*—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

h. *Geographic Area of Coverage*—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

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C21 - New Residential Construction in Selected Standard Metropolitan Statistical Areas

C22 - Housing Completions

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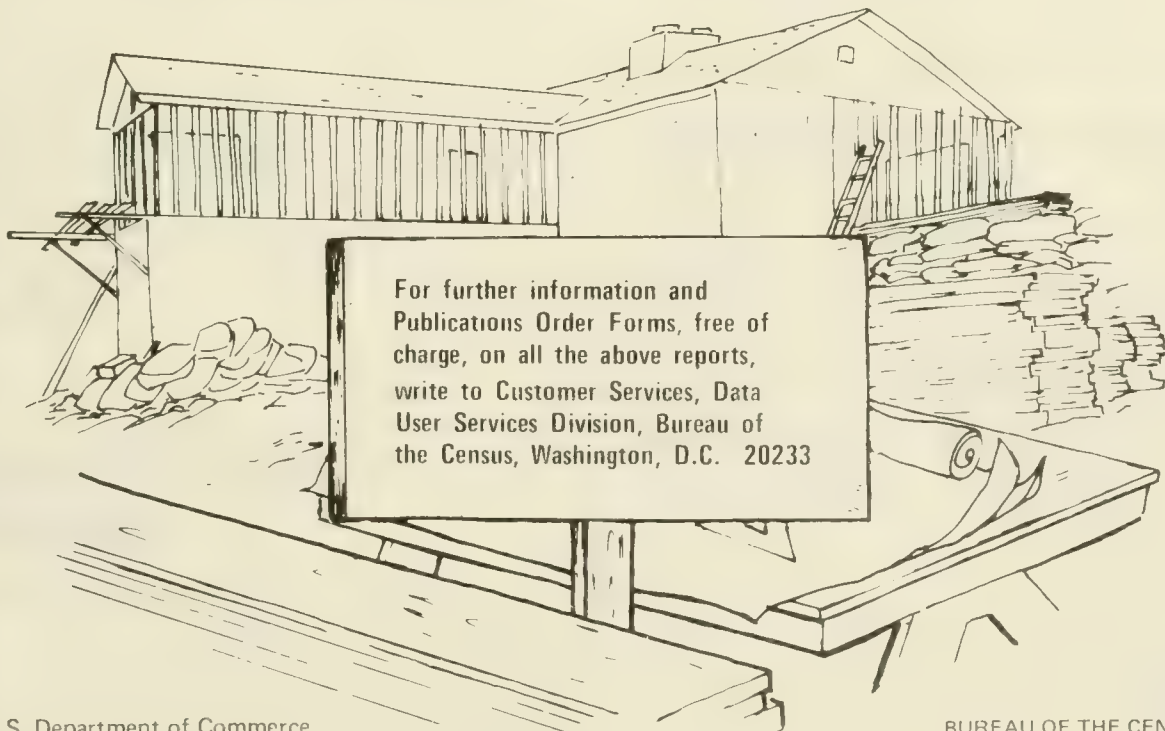
C27 - Price Index of New One-Family Houses Sold

C30 - Value of New Construction Put in Place

C40 - Housing Authorized by Building Permits and Public Contracts

C45 - Permits Issued for Demolition of Residential Structures in Selected Cities

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Flour Milling Products

SEPTEMBER 1980

M20A(80)-9

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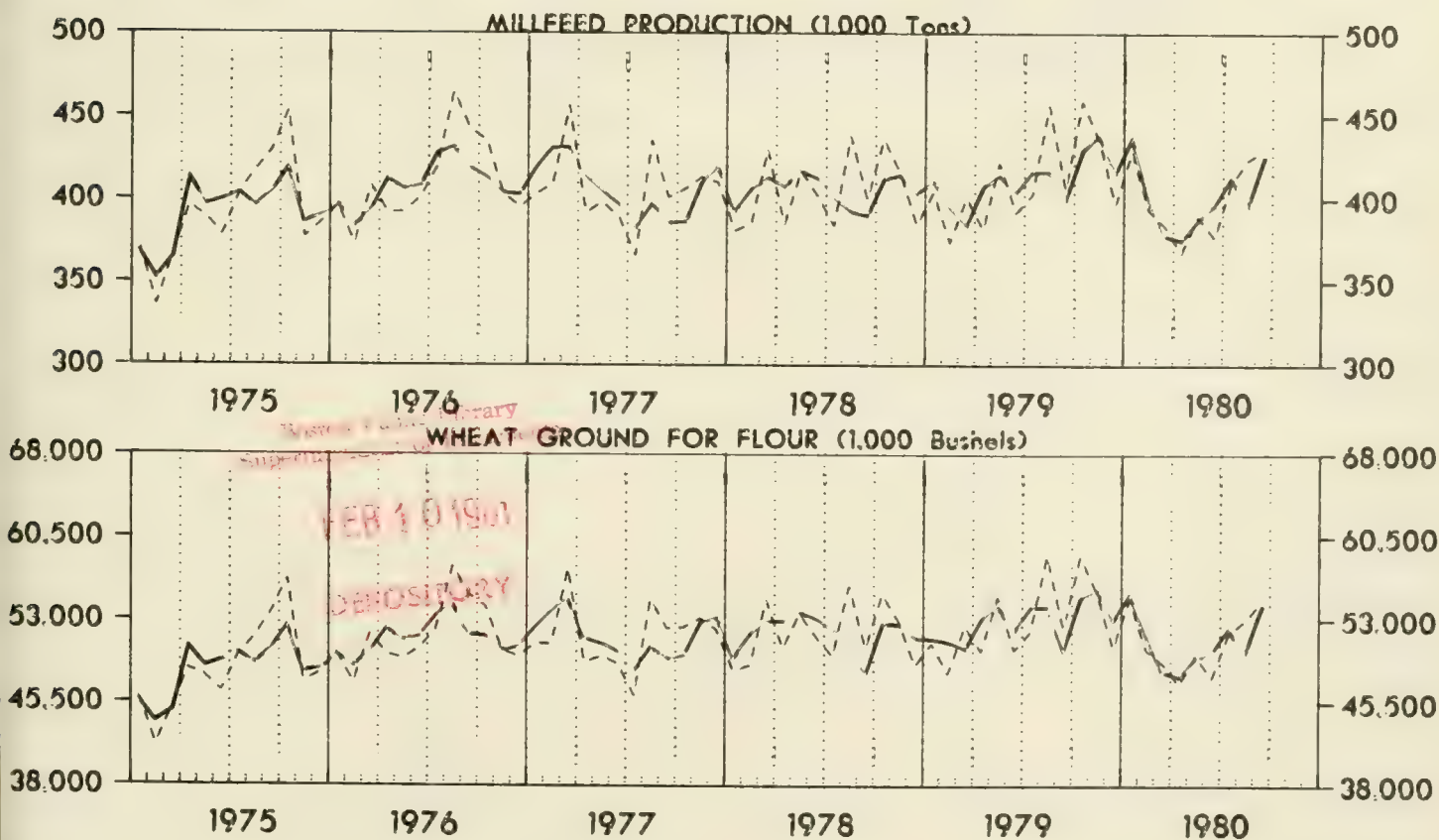
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING- 1975 TO 1980

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter (301) 763-5809.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	wheat ground for flour (1,000 bushels)
1980			
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	994	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	52,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147
August.....	1,087	393	50,886

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1980								
September (21 days).....	1,182	24,813	429,821	54,762	3,716	1,056	111.9	75.5
August (21 days).....	1,144	24,025	423,743	52,980	(NA)	1,056	111.8	75.6
July (22 days).....	1,052	23,137	409,644	51,760	(NA)	1,056	99.6	74.5
June (21 days).....	1,017	21,356	377,292	47,786	4,268	1,056	96.3	74.5
May (21 days).....	1,086	22,814	390,185	49,836	(NA)	1,059	102.5	76.3
April (22 days).....	965	21,231	367,709	47,170	(NA)	1,059	91.1	75.0
March (21 days).....	1,055	22,165	384,383	49,104	3,323	1,059	99.6	75.2
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,136	22,739	396,985	50,530	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.1
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days).....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September (20 days).....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9
August (23 days).....	1,089	25,053	438,773	56,062	(NA)	1,045	104.2	74.4

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	September 1980	August 1980	September 1979
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.....	2,804	3,187	3,418
20411 53	Straight semolina durum flour.....	M cwt.....	1,233	1,384	1,502
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.....	309	273	303
20416 11	Rye flour production.....	M cwt.....	143	125	131
20416 18	Rye millfeed production.....	Tons.....	1,431	1,310	1,642
20416 11	Rye flour stocks ¹	M cwt.....	11	(NA)	50
	24 hour capacity.....	..do.....	10	11	11

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	September 1980		August 1980		September 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	54,762	24,813	52,980	24,025	52,258	23,280
Middle Atlantic.....	7,055	3,163	6,856	3,111	7,117	3,205
New York.....	5,521	2,476	5,443	2,453	5,745	2,601
North Central.....	29,049	12,977	27,917	12,556	28,195	12,525
Ohio.....	3,321	1,476	2,841	1,252	3,064	1,349
Indiana.....	1,534	670	1,340	587	1,396	597
Illinois.....	3,453	1,530	3,199	1,431	3,162	1,408
Michigan.....	831	359	804	323	831	354
Minnesota.....	6,398	2,917	6,182	2,827	6,210	2,777
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,483	1,589	3,403	1,570	3,358	1,515
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,225	2,805	6,393	2,917	6,302	2,842
South Atlantic.....	3,587	1,672	3,818	1,685	3,083	1,341
East South Central.....	2,824	1,242	2,738	1,208	2,564	1,122
Tennessee.....	2,170	960	2,131	949	1,980	869
West South Central.....	3,965	1,791	3,746	1,617	3,283	1,480
Oklahoma.....	1,638	766	1,517	705	1,213	560
Texas.....	1,725	759	1,674	665	1,525	682
Mountain.....	2,951	1,400	2,925	1,368	3,661	1,678
Montana.....	713	329	679	317	643	298
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,331	2,568	4,980	2,480	4,355	1,929
Washington.....	1,366	611	1,421	632	1,276	575
Oregon.....	1,017	462	988	452	685	309
California and Hawaii.....	2,948	1,454	2,571	1,361	2,394	1,045

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	August 1980	July 1980	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (13140 10 and 13140 30) (1,000 cwt.)			
Total.....	68	12	1,366
Dominican Republic.....	-	-	11
Honduras.....	-	-	6
Guatemala.....	-	1	13
Colombia.....	-	-	-
Ecuador.....	1	-	3
Peru.....	15	-	77
Brazil.....	-	-	3
Bolivia.....	13	-	35
Chile.....	-	-	103
Morocco.....	15	-	336
Egypt.....	-	-	102
Israel.....	-	7	63
Jordan.....	-	-	5
India.....	12	-	35
Sri Lanka.....	-	-	108
Somalia.....	-	-	15
Philippines.....	-	-	251
Other.....	12	4	200
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (13140 20 and 13140 40) (1,000 cwt.)			
Total.....	2,137	894	11,453
Canada.....	3	3	24
Mexico.....	17	58	98
Bahamas.....	7	7	49
Jamaica.....	30	57	274
Honduras.....	-	-	2
Nicaragua.....	-	-	-
Colombia.....	-	1	46
Peru.....	-	-	-
Brazil.....	-	-	52
Bolivia.....	-	6	55
Surinam.....	6	6	66
Iceland.....	2	3	24
Morocco.....	-	-	-
Egypt.....	1,204	679	6,818
Jordan.....	4	-	7
Lebanon.....	-	2	8
Saudi Arabia.....	77	17	2,020
United Arab Emirates.....	5	3	47
India.....	-	-	1
Sri Lanka.....	-	-	-
Korean Republic.....	-	-	-
Philippines.....	-	-	22
Other.....	798	52	1,849
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (13065 40) (1,000 bu.)			
Total.....	139,622	123,589	813,216
Mexico.....	4,797	1,483	13,178
Jamaica.....	-	-	188
Haiti.....	196	194	2,041
Honduras.....	480	-	1,663
El Salvador.....	-	782	2,327
Costa Rica.....	467	411	2,457
Panama.....	99	431	1,547
Venezuela.....	3,976	1,498	16,162
Colombia.....	1,475	1,482	17,299
Ecuador.....	1,245	1,221	8,650
Peru.....	1,886	2,024	16,331
Brazil.....	928	8,059	52,791
Bolivia.....	869	819	4,547
Chile.....	4,184	4,911	21,577
Surinam.....	52	50	367
Portugal.....	1,157	2,229	16,764
German Democratic Republic.....	-	905	6,102
Poland.....	-	-	4,426
U.S.S.R.....	-	-	17,546
Morocco.....	1,280	733	7,926
Egypt.....	2,583	3,874	31,346
Israel.....	2,144	1,990	8,501
Iraq.....	-	-	9,810
Iran.....	-	-	1,837
Pakistan.....	513	370	4,742
Bangladesh.....	864	5,967	39,278
China (Mainland).....	44,769	31,691	112,726
Korean Republic.....	2,259	5,840	45,507
Indonesia.....	6,063	919	21,131
Philippines.....	3,010	2,896	16,759
Nigeria.....	3,031	3,818	25,370
Other.....	43,515	38,992	274,544

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
AUGUST 1980						
Wheat flour.....	24,025	(NA)	2,205	25,351	9.2	(NA)
JULY 1980						
Wheat flour.....	23,137	(NA)	906	9,826	3.9	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

<u>Domestic output</u>	<u>Exports</u>	<u>Imports</u>
20411	131.4010-131.4040	-

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports, Commodity by Country.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, *Flour Milling Products*. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501, effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

d. *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. *"Direct" vs "Total" Commodity Exports and Imports*—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

h. *Geographic Area of Coverage*—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

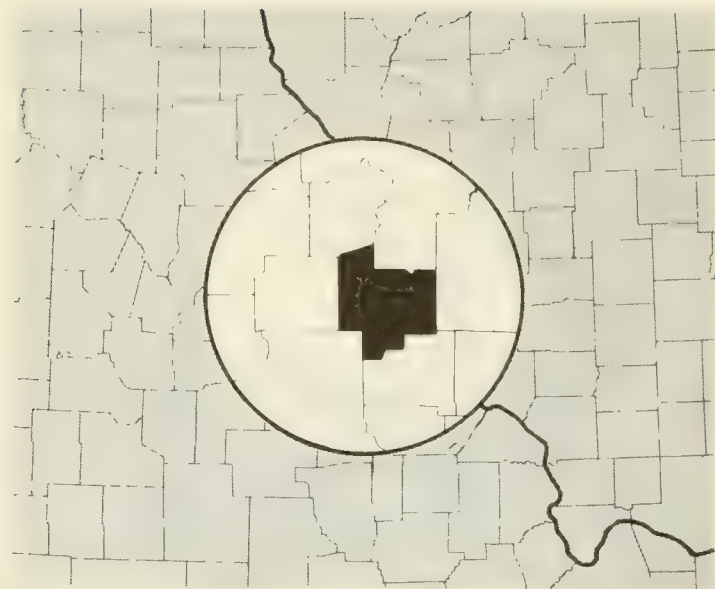
CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report	John Streeter	(301) 763-5809
Foreign Trade publications	Juanita Noone	(301) 763-5140
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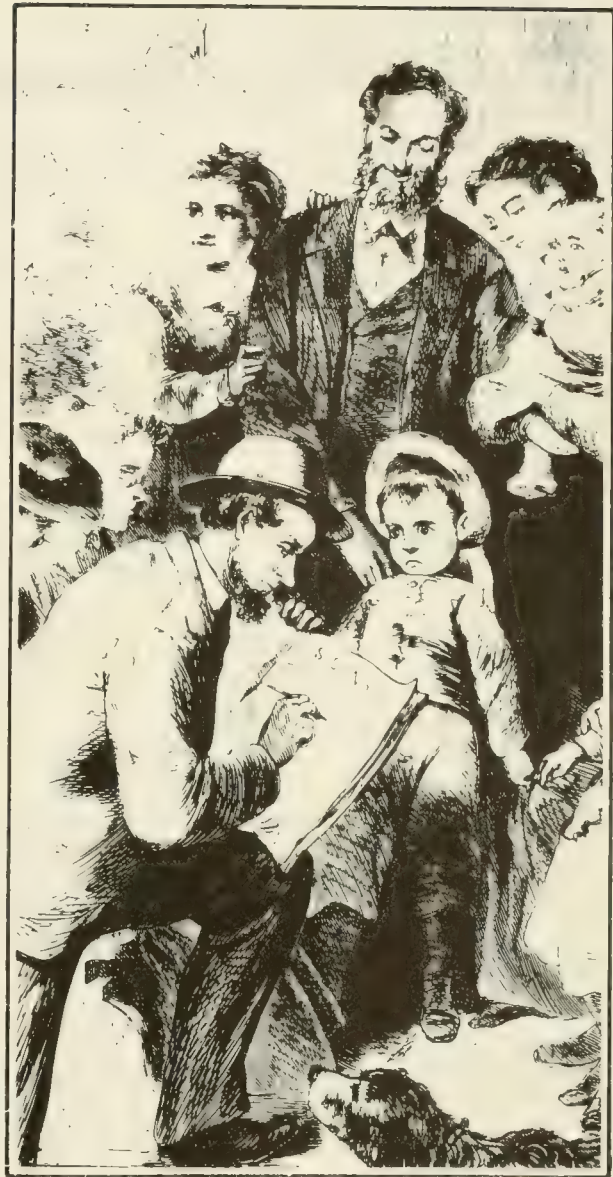
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Flour Milling Products



U.S. Department of Commerce
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OCTOBER 1980

M20A(80)-10
Issued December 1980

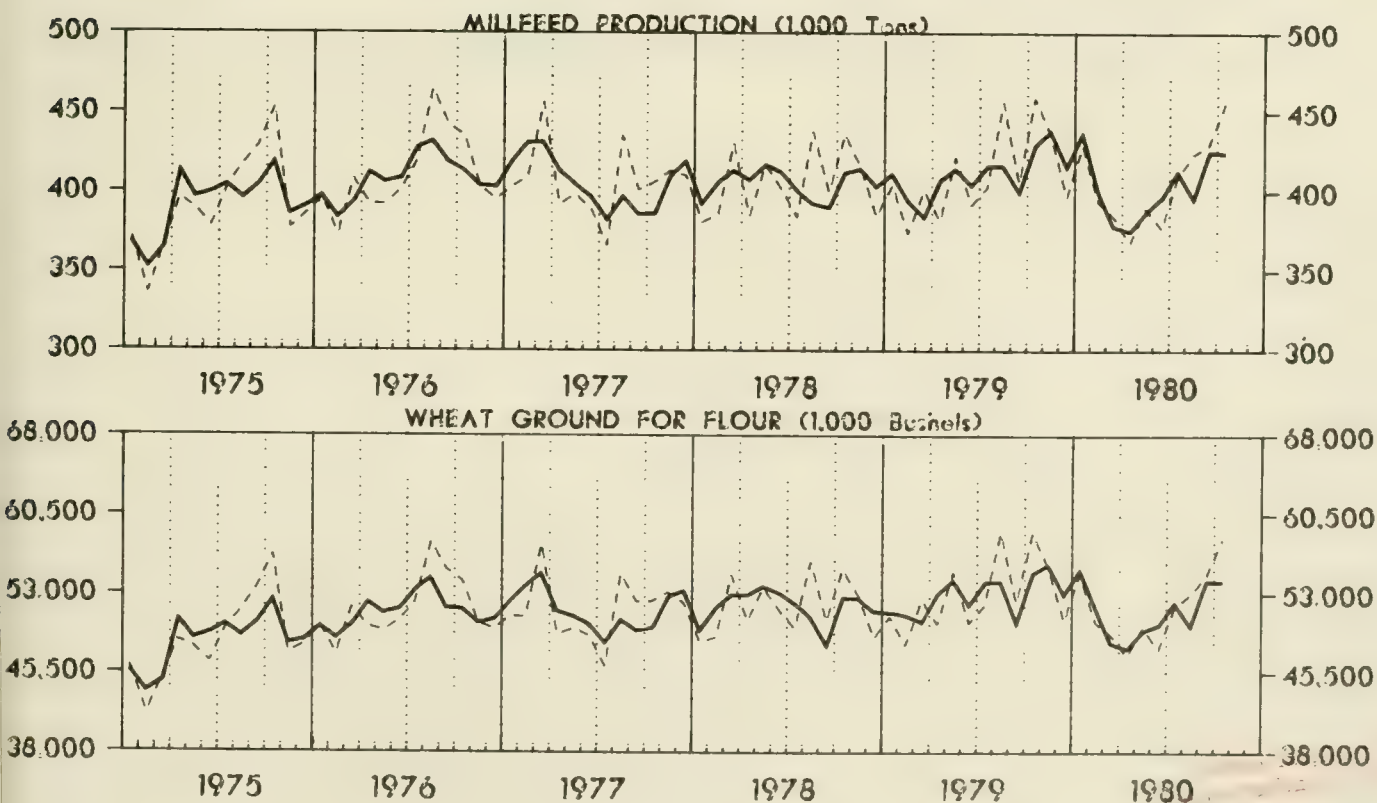
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING 1975 TO 1980

— Seasonally Adjusted
- - - Not Seasonally Adjusted



For address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter (301) 763-5809.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1980			
October.....	1,145	425	54,292
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,043	390	46,147

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1980								
October (23 days).....	1,145	26,350	455,796	58,171	(NA)	1,092	105.0	75.5
September (21 days).....	1,182	24,813	429,851	54,762	3,716	1,092	108.2	75.5
August (21 days).....	1,144	24,025	423,743	52,980	(NA)	1,056	111.8	75.6
July (22 days).....	1,052	23,137	409,644	51,760	(NA)	1,056	99.6	74.5
June (21 days).....	1,017	21,356	377,292	47,786	4,268	1,056	96.3	74.5
May (21 days).....	1,086	22,814	390,185	49,836	(NA)	1,059	102.5	76.3
April (22 days).....	965	21,231	367,709	47,170	(NA)	1,059	91.1	75.0
March (21 days).....	1,055	22,165	384,383	49,104	3,323	1,059	99.6	75.2
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,135	22,739	396,985	50,539	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.2
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,16	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days).....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6
September (20 days).....	1,123	22,456	400,263	50,531	3,342	1,066	105.3	73.9

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	October 1980	September 1980	October 1979
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.....	2,932	2,804	3,435
20411 53	Straight semolina durum flour.....	M cwt.....	1,265	1,233	1,500
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.....	326	309	332
20416 11	Rye flour production.....	M cwt.....	148	143	149
20416 18	Rye millfeed production.....	Tons.....	1,591	1,431	1,613
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	11	(NA)
	24 hour capacity.....	..do.....	11	10	11

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	October 1980		September 1980		October 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	58,171	26,350	54,762	24,813	58,772	26,137
Middle Atlantic.....	7,647	3,453	7,055	3,163	7,902	3,549
New York.....	6,006	2,705	5,521	2,476	6,397	2,878
North Central.....	30,866	13,845	28,923	12,977	31,506	14,044
Ohio.....	3,648	1,602	3,321	1,476	3,506	1,543
Indiana.....	1,694	741	1,534	670	1,540	663
Illinois.....	3,571	1,581	3,453	1,530	3,583	1,589
Michigan.....	961	420	831	359	980	436
Minnesota.....	7,113	3,224	6,399	2,917	7,004	3,166
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,022	1,844	3,483	1,589	3,812	1,720
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,322	2,856	6,225	2,805	6,890	3,114
South Atlantic.....	3,679	1,717	3,587	1,672	3,979	1,742
East South Central.....	2,668	1,196	2,824	1,242	2,882	1,267
Tennessee.....	2,137	940	2,170	960	2,250	994
West South Central.....	3,860	1,745	3,965	1,791	3,638	1,642
Oklahoma.....	1,640	765	1,638	766	1,407	651
Texas.....	1,640	719	1,725	759	1,642	728
Mountain.....	3,380	1,552	2,951	1,400	3,170	1,458
Montana.....	822	372	713	329	759	353
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	6,071	2,842	5,457	2,568	5,695	2,435
Washington.....	1,692	751	1,366	611	1,694	764
Oregon.....	1,092	496	1,017	462	737	326
California and Hawaii.....	3,287	1,595	3,074	1,495	3,264	1,345

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	September 1980	August 1980	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	252	68	1,618
Dominican Republic.....	1	-	13
Honduras.....	-	-	6
Guatemala.....	-	-	13
Colombia.....	-	-	-
Ecuador.....	2	1	5
Peru.....	57	15	135
Brazil.....	-	-	3
Bolivia.....	10	13	45
Chile.....	-	-	103
Morocco.....	16	15	352
Egypt.....	14	-	116
Israel.....	15	-	78
Jordan.....	-	-	5
India.....	-	12	35
Sri Lanka.....	54	-	162
Somalia.....	-	-	15
Philippines.....	38	-	289
Other.....	45	12	243
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	1,396	2,137	12,849
Canada.....	2	3	27
Mexico.....	2	17	101
Bahamas.....	8	7	57
Jamaica.....	2	30	276
Honduras.....	-	-	2
Nicaragua.....	-	-	-
Colombia.....	3	-	48
Peru.....	-	-	-
Brazil.....	-	-	52
Bolivia.....	-	-	55
Surinam.....	2	6	68
Iceland.....	1	2	24
Morocco.....	-	-	-
Egypt.....	177	1,204	6,997
Jordan.....	-	4	7
Lebanon.....	-	-	8
Saudi Arabia.....	358	77	2,382
United Arab Emirates.....	7	5	98
India.....	-	-	1
Sri Lanka.....	-	-	-
Korean Republic.....	-	-	-
Philippines.....	22	-	44
Other.....	812	798	2,602
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	136,032	139,622	949,248
Mexico.....	2,481	4,797	15,659
Jamaica.....	-	-	189
Haiti.....	747	196	2,787
Honduras.....	226	480	1,888
El Salvador.....	505	-	2,833
Costa Rica.....	485	467	2,938
Panama.....	201	99	1,748
Venezuela.....	2,546	3,976	18,709
Colombia.....	404	1,475	17,703
Ecuador.....	875	1,245	9,526
Peru.....	2,776	1,886	19,107
Brazil.....	7,329	928	60,120
Bolivia.....	-	869	4,547
Chile.....	3,479	4,184	25,056
Surinam.....	-	52	367
Portugal.....	1,065	1,157	17,829
German Democratic Republic.....	1,195	-	7,297
Poland.....	-	-	4,426
U.S.S.R.....	-	-	17,546
Morocco.....	5,139	1,280	13,065
Egypt.....	2,643	2,583	33,989
Israel.....	1,941	2,144	10,443
Iraq.....	-	-	9,810
Iran.....	-	-	1,837
Pakistan.....	957	513	5,699
Bangladesh.....	-	864	39,278
China (Mainland).....	30,570	44,769	143,297
Korean Republic.....	5,177	2,259	50,685
Indonesia.....	2,752	6,063	23,883
Philippines.....	2,941	3,010	19,700
Nigeria.....	2,954	3,031	28,325
Other.....	56,644	51,295	338,962

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
SEPTEMBER 1980						
Wheat flour.....	24,813	(NA)	1,648	20,935	6.6	(NA)
AUGUST 1980						
Wheat flour.....	24,025	(NA)	2,205	25,351	9.2	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

SIC (domestic output)ExportsImports

20411

131.4010-131.4040

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, *Flour Milling Products*. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501, effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

d. Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. "Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

h. Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule E—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report	John Streeter	(301) 763-5809
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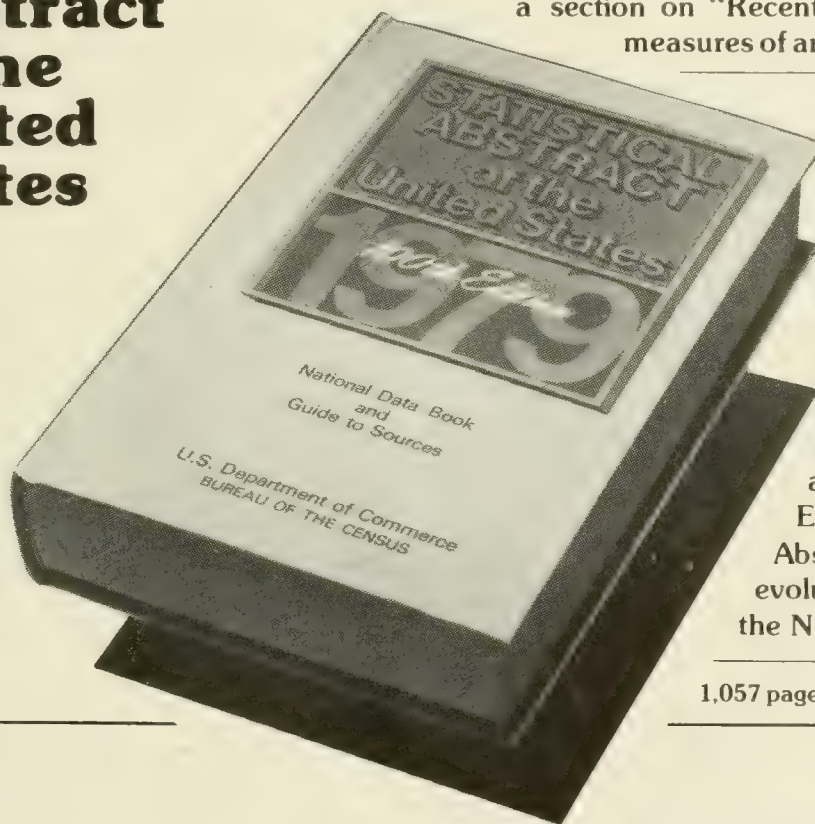
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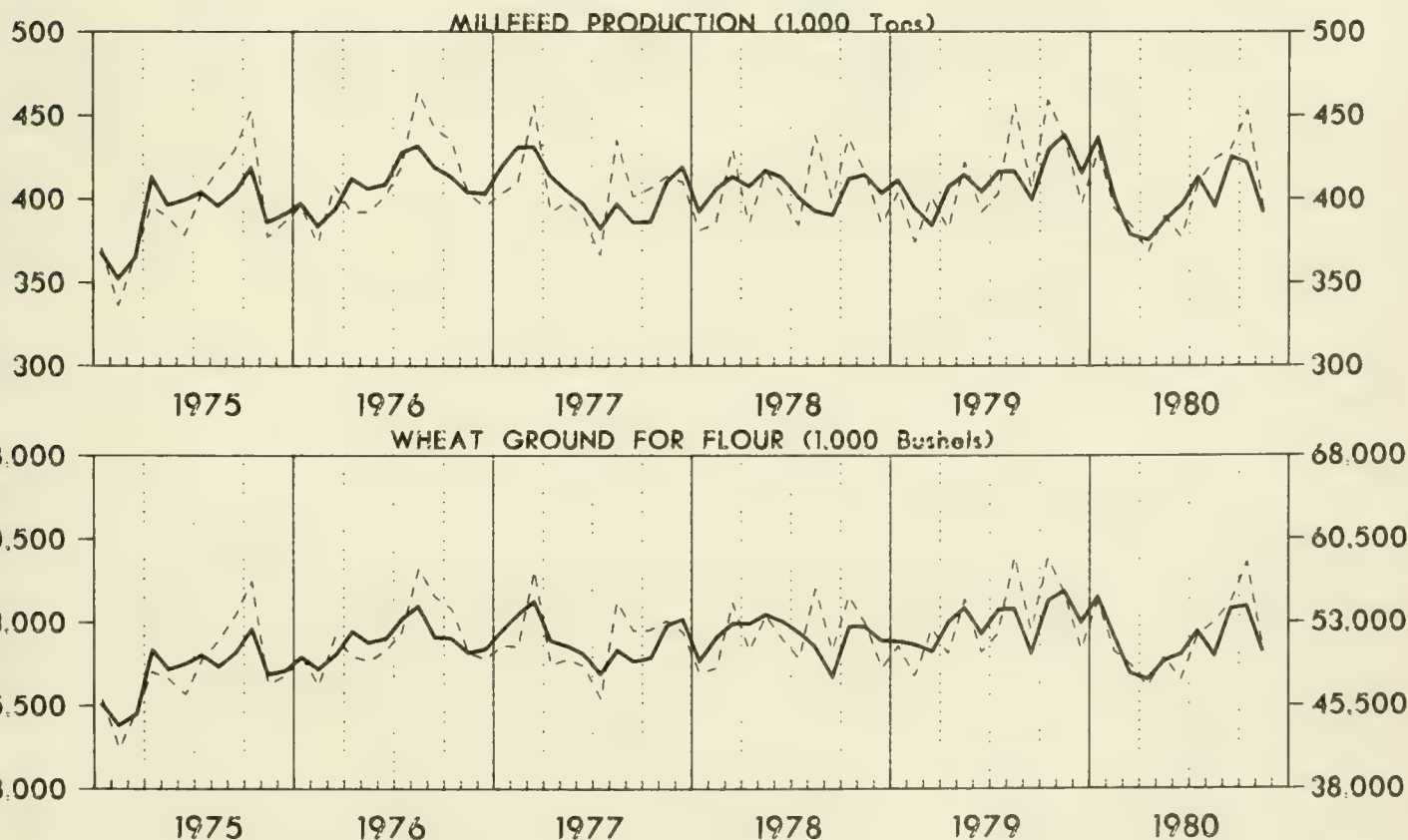
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING
1975 TO 1980

— Seasonally Adjusted
- - - Not Seasonally Adjusted



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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1980			
November.....	1,085	392	50,330
October.....	1,142	422	54,498
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728
October.....	1,084	412	52,742

¹The number of working days per month is computed on the basis of a 5 day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24 hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1980								
November (19 days).....	1,197	22,742	392,611	50,371	(NA)	1,092	109.6	75.3
October (23 days).....	1,143	26,285	453,219	58,392	(NA)	1,092	104.7	75.0
September (21 days).....	1,182	24,813	429,851	54,762	3,716	1,092	108.2	75.5
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January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,135	22,739	396,985	50,539	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.2
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,16	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7
October (22 days).....	1,129	24,843	436,433	55,348	(NA)	1,066	105.9	74.6

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	November 1980	October 1980	November 1979
00111 73	Durum wheat (included in tables 1A and 1B data):				
20411 53	Durum wheat ground.....	M bu.....	2,476	2,932	3,132
20411 55	Straight semolina durum flour.....	M cwt.....	1,064	1,265	1,385
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	321	326	284
20416 18	Rye flour production.....	M cwt.....	155	148	129
20416 11	Rye millfeed production.....	Tons.....	1,583	1,591	1,374
	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity.....	..do.....	11	11	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	November 1980		October 1980		November 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	50,371	22,742	58,392	26,285	55,586	24,778
Middle Atlantic.....	7,027	3,143	7,647	3,453	7,586	3,337
New York.....	5,502	2,458	6,006	2,705	5,867	2,572
North Central.....	25,876	11,711	30,913	13,865	29,138	13,049
Ohio.....	2,919	1,296	3,648	1,602	3,205	1,406
Indiana.....	1,365	592	1,694	741	1,097	476
Illinois.....	3,104	1,384	3,571	1,581	3,335	1,472
Michigan.....	787	346	1,008	440	887	396
Minnesota.....	5,829	2,667	7,113	3,224	6,484	2,930
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,906	1,334	4,022	1,844	3,571	1,623
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,995	2,741	6,322	2,856	6,705	3,014
South Atlantic.....	3,607	1,564	3,906	1,700	4,028	1,763
East South Central.....	2,523	1,122	2,668	1,196	2,610	1,144
Tennessee.....	1,994	888	2,137	949	2,005	880
West South Central.....	3,373	1,493	3,807	1,677	4,014	1,809
Oklahoma.....	1,356	635	1,640	765	1,618	751
Texas.....	1,555	653	1,587	651	1,773	780
Mountain.....	2,957	1,365	3,380	1,552	3,054	1,412
Montana.....	675	308	822	372	795	373
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,008	2,344	6,071	2,842	5,156	2,264
Washington.....	1,376	600	1,692	751	1,568	707
Oregon.....	837	376	1,092	496	673	300
California and Hawaii.....	2,795	1,368	3,287	1,595	2,915	1,257

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	October 1980	September 1980	Year to date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	182	252	1,800
Dominican Republic.....	-	1	13
Honduras.....	2	-	8
Guatemala.....	6	-	19
Colombia.....	-	-	-
Ecuador.....	-	2	5
Peru.....	21	57	136
Brazil.....	-	-	3
Bolivia.....	-	10	45
Chile.....	12	-	115
Morocco.....	12	16	364
Egypt.....	11	14	127
Israel.....	3	15	80
Jordan.....	-	-	5
India.....	2	-	37
Sri Lanka.....	20	54	182
Somalia.....	-	-	15
Philippines.....	13	38	302
Other.....	80	45	344
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	1,034	1,396	13,883
Canada.....	3	2	29
Mexico.....	9	2	111
Bahamas.....	7	8	64
Jamaica.....	9	2	284
Honduras.....	-	-	2
Nicaragua.....	-	-	-
Colombia.....	3	3	48
Peru.....	-	-	-
Brazil.....	-	-	52
Bolivia.....	-	-	55
Surinam.....	14	2	81
Iceland.....	4	1	28
Morocco.....	-	-	-
Egypt.....	1	177	6,997
Jordan.....	-	-	7
Lebanon.....	1	-	8
Saudi Arabia.....	396	358	2,773
United Arab Emirates.....	9	7	63
India.....	-	-	1
Sri Lanka.....	-	-	-
Korean Republic.....	-	-	-
Philippines.....	-	22	44
Other.....	579	812	3,236
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	116,176	136,032	1,065,424
Mexico.....	3,099	2,481	18,758
Jamaica.....	-	-	189
Haiti.....	184	747	2,974
Honduras.....	202	226	2,092
El Salvador.....	18	505	2,851
Costa Rica.....	-	485	2,938
Panama.....	101	201	1,849
Venezuela.....	3,375	2,546	22,083
Colombia.....	932	404	18,635
Ecuador.....	930	875	10,456
Peru.....	2,202	2,776	21,309
Brazil.....	-	7,329	60,120
Bolivia.....	-	-	4,547
Chile.....	3,200	3,479	28,256
Surinam.....	54	-	421
Portugal.....	2,224	1,065	20,052
German Democratic Republic.....	-	1,195	7,297
Poland.....	1,254	-	5,680
U.S.S.R.....	10,019	-	27,564
Morocco.....	3,788	5,139	16,853
Egypt.....	4,244	2,643	38,233
Israel.....	1,125	1,941	11,568
Iraq.....	-	-	9,810
Iran.....	-	-	1,837
Pakistan.....	-	957	5,699
Bangladesh.....	734	-	40,012
China (Mainland).....	30,448	30,570	173,745
Korean Republic.....	4,091	5,177	54,775
Indonesia.....	1,179	2,752	25,062
Philippines.....	2,012	2,941	21,712
Nigeria.....	3,151	2,954	31,475
Other.....	37,610	36,644	376,572

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
OCTOBER 1980						
Wheat flour.....	26,285	(NA)	1,216	17,310	-6	(NA)
SEPTEMBER 1980						
Wheat flour.....	24,813	(NA)	1,648	20,935	6.6	(NA)

Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

SIC (domestic output)ExportsImports

20411

131.4010-131.4040

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. The seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501, effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

d. Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. "Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

h. Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
M20C	Monthly	<i>Confectionery, Including Chocolate Products</i>
<i>Foreign Trade Reports</i>		
FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report	John Streeter	(301) 763-5809
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Customer Services (DUSD)	(301) 449-1600
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- Plumbing facilities
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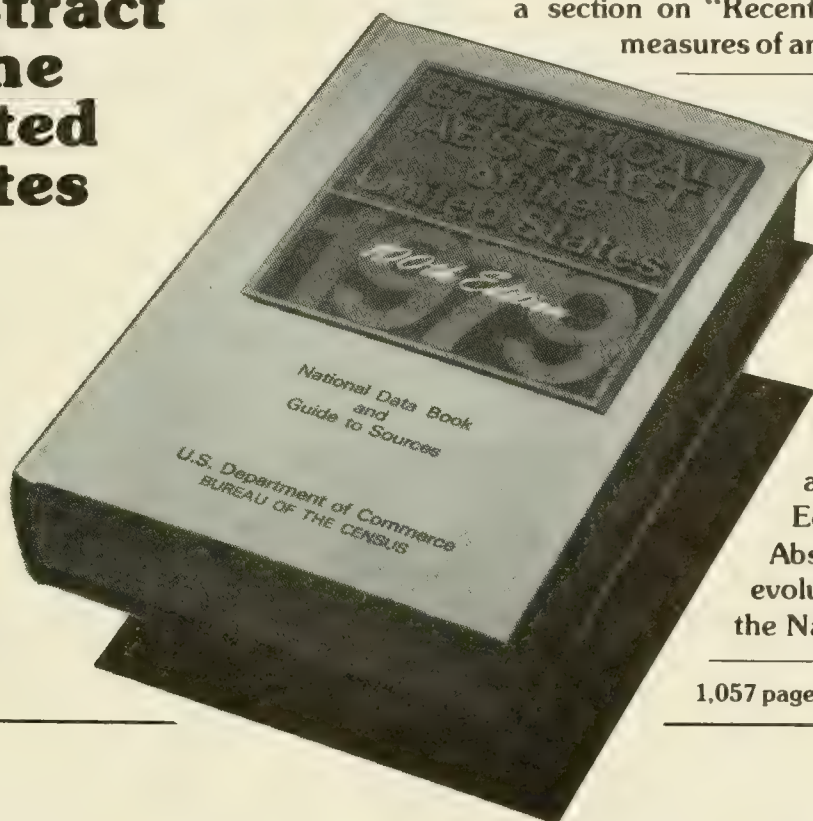
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Flour Milling Products



M 20 A (80) - 12

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DECEMBER 1980

M20A(80)-12
Issued February 1981

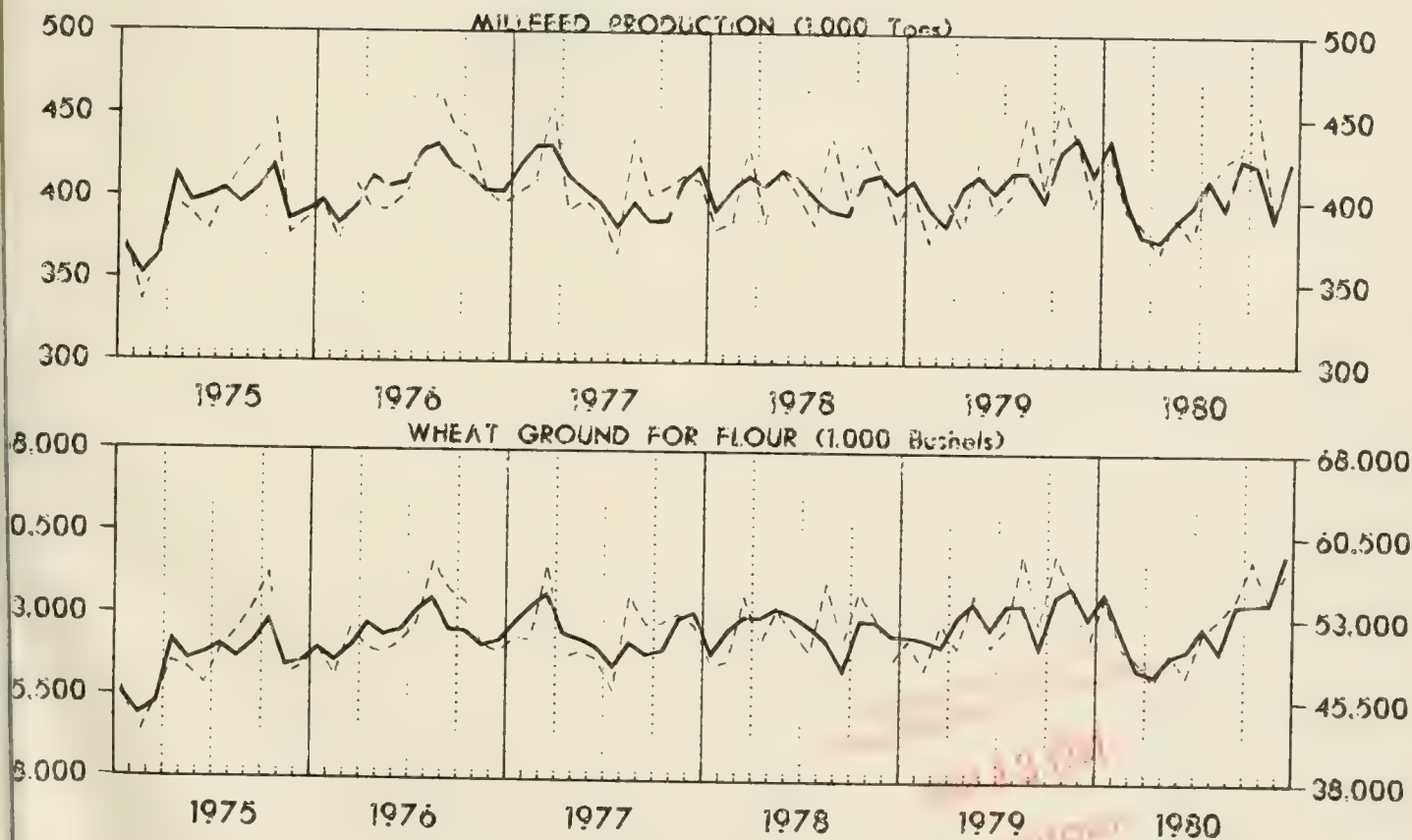
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING:
1975 TO 1980

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1980			
December.....	1,198	424	58,877
November.....	1,085	391	54,537
October.....	1,142	422	54,498
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457
November.....	1,093	415	52,728

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1980

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1980								
December (22 days).....	1,155	25,404	410,493	57,157	3,842	1,056	109.3	74.1
November (19 days).....	1,197	24,420	392,305	54,582	(NA)	¹ 1,056	113.4	74.6
October (23 days).....	1,143	26,285	453,219	58,392	(NA)	¹ 1,056	108.2	75.0
September (21 days).....	1,182	24,813	429,851	54,762	3,716	¹ 1,056	111.9	75.5
August (21 days).....	1,144	24,025	423,743	52,980	(NA)	1,056	108.3	75.6
July (22 days).....	1,052	23,137	409,644	51,760	(NA)	1,056	99.6	74.5
June (21 days).....	1,017	21,356	377,292	47,786	4,268	1,056	96.5	74.5
May (21 days).....	1,086	22,814	390,185	49,836	(NA)	1,059	102.5	76.3
April (22 days).....	965	21,231	367,709	47,170	(NA)	1,059	91.1	75.0
March (21 days).....	1,055	22,165	384,383	49,104	3,323	1,059	99.6	75.2
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,135	22,739	396,985	50,539	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
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September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8
November (21 days).....	1,130	23,738	416,152	52,934	(NA)	1,066	106.0	74.7

(NA) Not available.

¹ Revised by 5 percent or more from previously published figures.² The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.³ Collected quarterly.³ Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	December 1980	November 1980	December 1979
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,474	2,476	2,990
20411 55	Straight semolina durum flour.....	M cwt.....	1,069	1,064	1,294
	Blended semolina durum flour.....	do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	305	321	267
20416 18	Rye flour production.....	M cwt.....	140	155	120
20416 18	Rye millfeed production.....	Tons.....	1,461	1,583	1,115
20416 11	Rye flour stocks ¹	M cwt.....	12	(NA)	18
	24 hour capacity.....	do.....	10	11	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	December 1980		November 1980		December 1979	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	57,157	25,404	54,582	24,420	50,530	22,739
Middle Atlantic.....	7,322	3,269	7,123	3,182	7,046	3,221
New York.....	5,764	2,563	5,502	2,458	5,626	2,581
North Central.....	27,448	12,214	26,329	11,851	26,673	11,974
Ohio.....	2,802	1,223	2,919	1,296	2,749	1,213
Indiana.....	1,528	663	1,361	589	1,259	545
Illinois.....	3,228	1,427	3,104	1,384	2,822	1,252
Michigan.....	830	369	787	346	714	313
Minnesota.....	6,082	2,768	5,872	2,656	5,947	2,696
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,754	1,272	2,906	1,334	3,318	1,510
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,329	2,788	5,995	2,741	6,537	2,958
South Atlantic.....	3,923	1,717	3,643	1,605	3,351	1,468
East South Central.....	2,689	1,212	2,523	1,122	2,447	1,074
Tennessee.....	2,119	938	1,994	888	1,837	811
West South Central.....	3,885	1,583	3,759	1,536	3,643	1,642
Oklahoma.....	1,534	715	1,359	635	1,476	685
Texas.....	1,831	636	1,941	696	1,601	706
Mountain.....	3,126	1,440	2,957	1,365	2,720	1,256
Montana.....	724	334	675	308	674	315
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	8,764	3,909	8,248	3,759	4,650	2,104
Washington.....	1,338	593	1,376	600	1,378	624
Oregon.....	1,019	462	837	371	641	293
California and Hawaii.....	6,407	2,854	6,035	2,783	2,631	1,187

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	November 1980	October 1980	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	412	182	2,212
Dominican Republic.....	-	-	13
Honduras.....	-	2	8
Guatemala.....	1	6	20
Colombia.....	-	-	-
Ecuador.....	-	-	5
Peru.....	8	21	164
Brazil.....	-	-	3
Bolivia.....	-	-	45
Chile.....	26	12	141
Morocco.....	144	12	508
Egypt.....	104	11	231
Israel.....	-	3	92
Jordan.....	-	-	5
India.....	-	2	37
Sri Lanka.....	44	20	225
Somalia.....	-	-	15
Philippines.....	33	13	335
Other.....	52	80	365
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	522	1,034	14,405
Canada.....	4	3	33
Mexico.....	3	9	114
Bahamas.....	5	7	89
Jamaica.....	15	9	299
Honduras.....	-	-	2
Nicaragua.....	-	-	-
Colombia.....	-	3	48
Peru.....	1	-	1
Brazil.....	-	-	52
Bolivia.....	31	-	85
Surinam.....	13	14	93
Iceland.....	8	4	36
Morocco.....	-	-	-
Egypt.....	61	-	7,059
Jordan.....	1	-	9
Lebanon.....	3	1	12
Saudi Arabia.....	312	396	3,085
United Arab Emirates.....	1	9	64
India.....	-	-	1
Sri Lanka.....	-	-	-
Korean Republic.....	-	-	-
Philippines.....	35	-	79
Other.....	29	579	3,214
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	112,166	116,176	1,177,590
Mexico.....	2,350	3,099	21,109
Jamaica.....	-	-	189
Haiti.....	463	184	3,435
Honduras.....	324	202	2,414
El Salvador.....	687	18	3,538
Costa Rica.....	270	-	3,208
Panama.....	202	101	2,051
Venezuela.....	984	3,375	23,067
Colombia.....	-	932	18,635
Ecuador.....	850	930	11,306
Peru.....	146	2,202	21,455
Brazil.....	2,085	-	62,205
Bolivia.....	-	-	4,547
Chile.....	5,342	3,200	33,598
Surinam.....	-	54	421
Portugal.....	242	2,224	20,294
German Democratic Republic.....	-	-	7,297
Poland.....	6,197	1,254	11,877
U.S.S.R.....	22,102	10,019	49,666
Morocco.....	1,507	3,788	18,360
Egypt.....	4,596	4,244	42,828
Israel.....	2,014	1,125	13,582
Iraq.....	-	-	9,810
Iran.....	-	-	1,837
Pakistan.....	-	-	5,699
Bangladesh.....	-	734	40,012
China (Mainland).....	20,942	30,448	194,686
Korean Republic.....	8,971	4,091	63,747
Indonesia.....	2,260	1,179	27,321
Philippines.....	3,883	2,012	25,595
Nigeria.....	1,803	3,151	33,278
Other.....	23,946	37,610	400,424

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
NOVEMBER 1980						
Wheat flour.....	24,420	(NA)	934	12,290	3.8	(NA)
OCTOBER 1980						
Wheat flour.....	20,285	(NA)	1,216	17,310	4.6	(NA)

Comparison of SIC codes (domestic output) and Schedule B export codes is as follows:

SIC (domestic output)Export

20411

131.4010-131.4940

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. The seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation—There are different methods of valuation for the three types of data:

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501 effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

"Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
M20C	Monthly	<i>Confectionery, Including Chocolate Products</i>
<i>Foreign Trade Reports</i>		
FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

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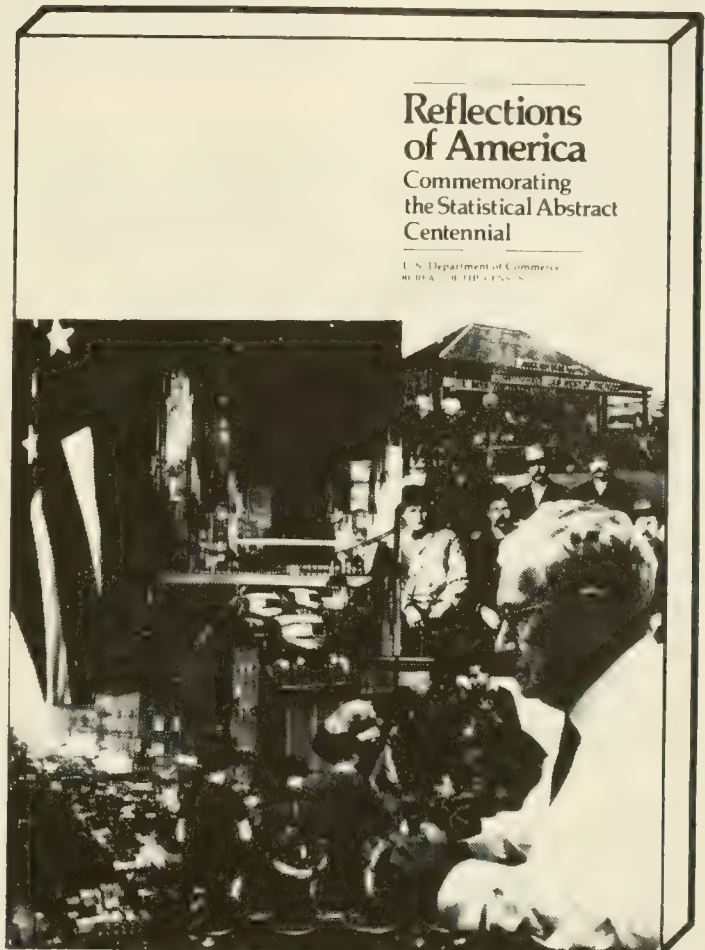
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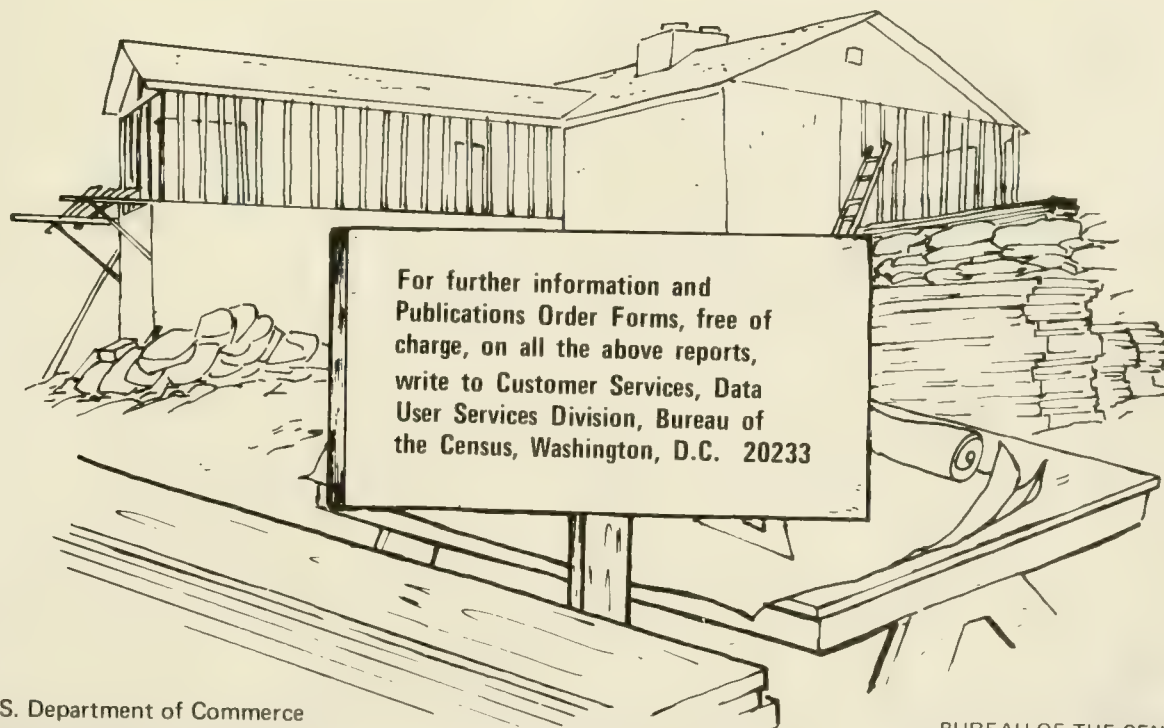
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CURRENT INDUSTRIAL REPORTS

Flour Milling Products

SUMMARY FOR 1980

M20A(80)-13
Issued April 1981

SUMMARY OF FINDINGS

Total commercial production of wheat flour in 1980 amounted to 283 million cwt. sacks, about 1 million cwt. sacks below the 1979 production. Production figures in 1980 and 1979 were at 104.6 and 105.2 percent, respectively, of total annual capacity.

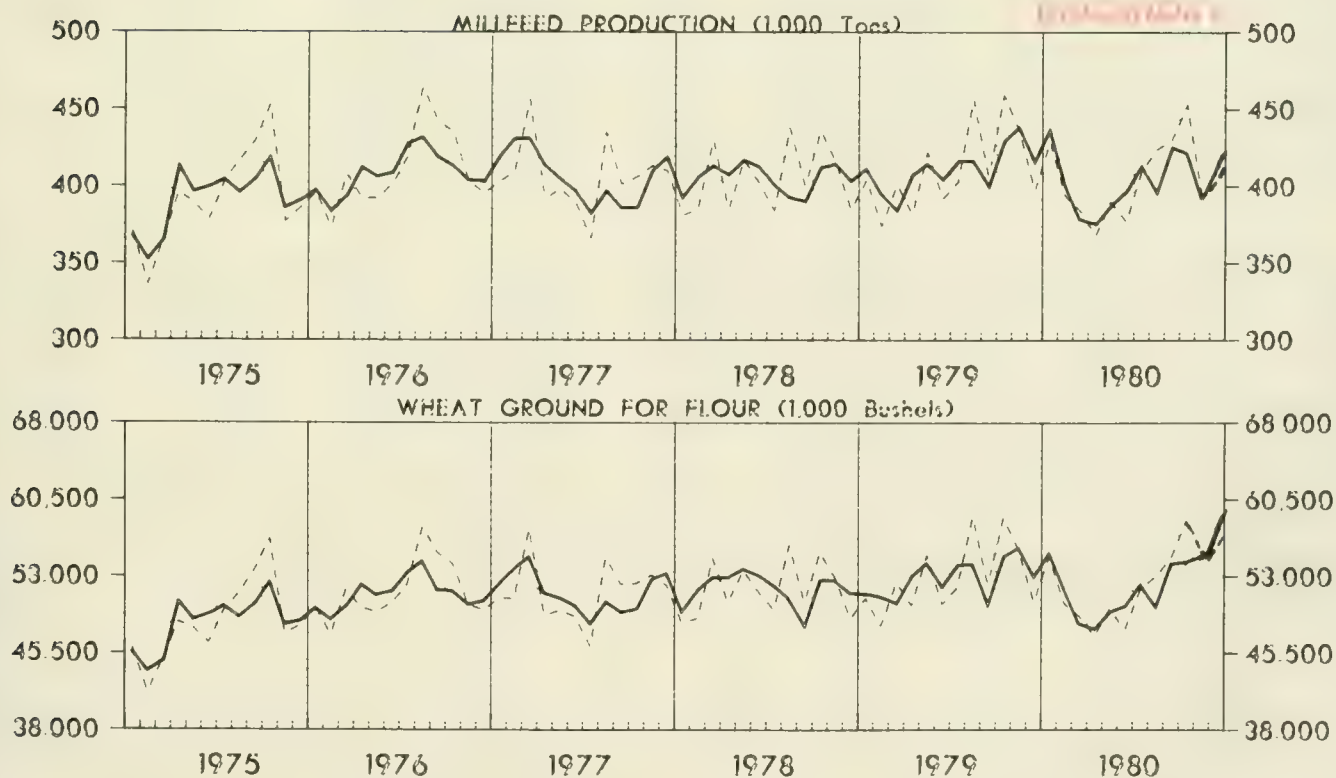
Wheat mills in 1980 and 1979 ground 628.6 and 636.4 million bushels of wheat; corresponding millfeed production figures for these years were 4,866 and 4,945 thousand tons.

Production of rye flour in 1980 amounted to 1,617 thousand cwt. sacks, compared with 1,580 thousand cwt. in 1979. Rye grinding in 1980 and 1979 were 3,549 and 3,589 thousand bushels, respectively.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING 1975 TO 1980

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

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Table 1. SUMMARY: COMMERCIAL WHEAT MILLING PRODUCTION: 1971 TO 1980

Year	Wheat flour production (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Average pounds per cwt. sacks of flour		Flour extraction rate ¹ (percent)
				Wheat	Millfeed	
1980.....	282,655	628,559	4,866	133.4	34.4	74.9
1979.....	284,051	636,375	4,945	134.4	34.8	74.4
1978.....	277,950	621,321	4,860	134.1	35.0	74.6
1977.....	275,784	618,125	4,787	134.5	34.7	74.4
1976.....	275,077	618,284	4,920	135.0	35.8	74.2
1975.....	258,985	582,675	4,701	134.9	36.3	74.1
1974.....	251,097	562,962	4,483	134.5	35.7	74.3
1973.....	254,661	567,287	4,395	133.7	34.5	74.8
1972.....	250,441	557,801	4,303	133.6	34.4	74.8
1971.....	249,810	555,092	4,279	133.3	34.3	75.0

¹Wheat flour production as compared with the amount of wheat ground.

Table 2. COMMERCIAL WHEAT MILLING PRODUCTION, SEASONALLY ADJUSTED AND UNADJUSTED, BY MONTH: 1980 AND 1979

Month	Seasonally adjusted			Unadjusted						
	Wheat flour production average per working day ¹ (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Wheat flour production (1,000 cwt. sacks)		Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Average pounds per cwt. sack of flour		Flour extraction rate ² (percent)
				Average per working day ¹	Calendar month			Wheat	Millfeed	
1980										
Total.....	(X)	(X)	(X)	(X)	282,655	628,599	4,866	133.4	34.4	74.9
January.....	1,163	55,454	438	1,116	24,553	54,955	429	134.3	34.9	74.5
February.....	1,061	51,901	402	1,077	22,624	50,352	394	133.4	34.8	74.9
March.....	1,043	48,451	379	1,055	22,165	49,104	384	132.9	34.7	75.2
April.....	999	47,950	376	965	21,231	47,170	368	133.3	34.7	75.0
May.....	1,076	49,637	388	1,086	22,814	49,836	390	131.1	34.2	76.3
June.....	1,060	50,171	397	1,017	21,356	47,786	377	134.3	35.3	74.5
July.....	1,108	52,329	414	1,052	23,137	51,760	410	134.2	35.4	74.5
August.....	1,090	50,154	397	1,144	24,025	52,980	424	132.3	35.3	75.6
September.....	1,152	54,327	426	1,182	24,813	54,762	430	132.4	34.7	75.5
October.....	1,142	54,498	422	1,143	26,285	58,392	453	133.2	34.5	75.0
November.....	1,085	54,537	391	1,197	24,420	54,582	392	134.1	32.1	74.6
December.....	1,189	58,530	429	1,147	25,232	56,920	415	135.4	32.9	74.0
1979										
Total.....	(X)	(X)	(X)	(X)	284,051	636,375	4,945	134.4	34.8	74.4
January.....	1,080	51,310	409	1,037	22,822	50,999	405	134.1	35.5	74.6
February.....	1,079	51,165	395	1,077	21,547	48,271	375	134.4	34.8	74.4
March.....	1,089	50,987	388	1,066	23,459	52,571	402	134.5	34.3	74.4
April.....	1,088	52,397	405	1,062	22,296	50,319	383	135.4	34.4	73.8
May.....	1,124	53,815	413	1,117	24,578	55,216	423	134.8	34.4	74.2
June.....	1,064	52,758	408	1,025	22,541	50,250	392	133.8	34.8	74.8
July.....	1,163	54,053	419	1,120	23,513	52,111	404	133.0	34.4	75.2
August.....	1,150	54,306	420	1,145	26,340	59,006	458	134.4	34.8	74.4
September.....	1,122	52,801	412	1,226	23,285	52,375	408	135.0	35.0	74.1
October.....	1,124	55,082	427	1,137	26,143	58,904	460	135.2	35.2	74.0
November.....	1,148	55,922	429	1,180	24,783	55,710	437	134.9	35.3	74.1
December.....	1,122	53,134	424	1,137	22,744	50,643	398	133.6	35.0	74.9

(X) Not applicable.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Wheat flour production as compared with amount of wheat ground.

Table 3. COMMERCIAL RYE MILLING PRODUCTION, BY MONTH: 1980 AND 1979

Month	Rye flour production (1,000 cwt. sacks)	Rye ground for flour (1,000 bushels)	Millfeed production (tons)	Average pounds ground per cwt. sack of flour		Flour extraction rate ¹ (percent)
				Rye	Millfeed	
1980						
Total.....	1,617	3,549	17,674	122.9	21.9	81.4
January.....	153	351	2,011	128.5	26.3	77.8
February.....	126	283	1,561	125.8	24.8	79.5
March.....	125	274	1,261	122.8	20.2	81.5
April.....	114	248	1,296	121.8	22.7	82.1
May.....	127	283	1,508	124.8	23.8	80.1
June.....	118	262	1,231	124.3	20.9	80.4
July.....	140	306	1,367	122.4	19.5	81.7
August.....	125	273	1,310	122.3	21.0	81.8
September.....	143	309	1,431	121.0	20.0	82.6
October.....	148	326	1,591	123.4	21.5	81.1
November.....	155	321	1,583	116.0	20.4	86.2
December.....	143	313	1,524	122.6	21.3	81.6
1979						
Total.....	1,580	3,589	19,363	127.2	23.8	78.6
January.....	134	325	1,937	135.8	28.9	73.6
February.....	115	274	1,652	133.4	28.7	74.9
March.....	147	340	1,958	129.5	26.6	77.2
April.....	136	288	1,594	118.6	23.4	84.3
May.....	123	278	1,510	126.6	24.6	79.0
June.....	129	299	1,785	129.8	27.7	77.0
July.....	130	293	1,639	126.2	25.2	79.2
August.....	137	306	1,544	125.1	22.5	79.9
September.....	131	303	1,642	129.5	25.1	77.2
October.....	149	332	1,613	124.8	21.7	80.1
November.....	129	284	1,374	123.3	21.3	81.1
December.....	120	267	1,115	124.6	18.6	80.3

¹Rye flour production as compared with amount of rye ground.

Table 4. COMMERCIAL WHEAT MILLING PRODUCTION, BY GEOGRAPHIC AREA: 1980 AND 1979

Geographic areas	1980				1979			
	Wheat ground for flour (1,000 bushels)	Wheat flour production			Wheat ground for flour (1,000 bushels)	Wheat flour production		
		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²
United States.....	628,599	282,655	1,059,643	104.6	636,375	284,051	1,054,589	105.2
Middle Atlantic Division.....	82,320	37,285	143,430	101.9	85,180	38,316	151,989	98.5
New York.....	64,603	29,080	114,774	99.4	68,762	30,976	125,326	96.5
North Central Division.....	322,412	144,570	559,288	101.4	337,448	150,782	558,388	105.5
Ohio.....	35,146	15,523	62,368	97.2	35,512	15,591	58,345	104.4
Indiana.....	16,605	7,234	33,355	85.1	16,188	6,884	38,361	70.1
Illinois.....	36,902	16,342	61,418	104.3	37,205	16,418	61,034	105.1
Michigan.....	9,894	4,285	22,249	75.5	10,146	4,429	20,449	84.6
Minnesota.....	72,971	33,096	126,234	102.8	71,602	32,304	129,198	97.7
Iowa.....	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(NA)
Missouri.....	37,880	17,364	59,904	113.7	42,975	19,539	67,919	112.4
Nebraska.....	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(NA)
Kansas.....	72,210	32,785	118,755	108.3	79,237	35,818	120,491	116.1
South Atlantic Division.....	44,429	19,559	79,574	96.4	42,575	18,038	74,481	94.6
East South Central Division.....	30,835	13,639	51,583	103.7	31,312	13,791	49,830	108.1
Tennessee.....	23,861	10,550	40,112	103.1	24,101	10,686	38,359	108.8
West South Central Division.....	44,058	19,648	68,906	111.8	44,018	19,790	67,813	114.0
Oklahoma.....	18,183	8,464	29,113	114.0	17,863	8,244	29,113	110.6
Texas.....	19,138	8,182	27,815	115.4	19,111	8,423	26,500	124.2
Mountain Division.....	34,254	15,875	60,195	103.4	35,614	16,357	61,995	103.1
Montana.....	7,926	3,669	13,736	104.7	7,958	3,716	13,548	107.1
Utah.....	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(NA)
Pacific Division.....	70,291	32,079	96,667	130.1	60,229	26,978	90,093	117.0
Washington.....	17,289	7,737	28,735	105.6	17,125	7,740	27,985	108.0
Oregon.....	11,395	5,180	19,900	102.1	9,449	4,210	18,800	87.5
California and Hawaii.....	41,607	19,162	48,032	156.5	33,655	15,028	41,108	142.8

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.

¹Capacity as reported for December of each year.²Estimated annual capacity is obtained by multiplying daily capacity by the number of work days during the year: 255 for 1980 and 256 for 1979.

These figures are calculated on the basis of a five day week with allowances for the following holidays: January 1, Memorial Day, July 4, Thanksgiving Day, and December 25.

Table 5. PRODUCTION AND MILL STOCKS OF WHEAT FLOUR, BY QUARTER:
1980 AND 1979

(Figures in 1,000 cwt. sacks)

Quarter	Production	Mill stocks
1980		
First quarter.....	69,342	3,323
Second quarter.....	64,401	4,268
Third quarter.....	71,975	3,716
Fourth quarter.....	75,937	3,842
1979		
First quarter.....	67,828	3,477
Second quarter.....	69,415	3,895
Third quarter.....	73,138	3,813
Fourth quarter.....	73,670	3,975

Table 6. DURUM WHEAT PRODUCTS: 1980 AND 1979

Item	1980		1979	
	Jan. 1- June 30	July 1- Dec. 31	Jan. 1- June 30	July 1- Dec. 31
Durum wheat ground (1,000 bushels).....	17,435	16,047	19,058	19,927
Straight semolina and durum flour produced (1,000 cwt. sacks).....	7,759	6,961	8,599	8,805
Blended semolina and durum flour produced (1,000 cwt. sacks).....	(D)	(D)	(D)	(D)

(D) Withheld to avoid disclosing figures for individual companies.

Table 7. PRODUCTION AND EXPORTS OF WHEAT FLOUR: 1980

(Quantity in 1,000 cwt.; value in \$1,000)

Product code	Item	Quantity produced	Exports of domestic merchandise ¹		Percent exports to manufacturers' production
			Quantity	Value	
20411 --	Wheat flour.....	282,655	17,377	210,902	6.1

Note: Comparison of domestic production and export codes is as follows:

<u>Domestic output</u>	<u>Export</u>
20411 -- Wheat flour	131.4010-131.4040

¹Source: Bureau of the Census Report FT-410, U.S. Exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey is a mail canvass of firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1977 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1977 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The monthly figures include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted and unadjusted data in table 2. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census

Method II seasonal adjustment program. This program is a ratio-to-moving average method. It largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data provide a better measure of the month-to-month variations which are due to factors other than seasonal pattern. Additional information concerning seasonal adjustment is available in the seasonal adjustment supplement issued in this series.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation—There are different methods of valuation for the three types of data:

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501 effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

"Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

HISTORICAL NOTE

The current M20A series of monthly reports with annual summaries of wheat ground and wheat milling products originated in May 1923. Data by States have been published monthly since 1927. Beginning in 1931 and ending with the June 1947 report, monthly wheat flour production by capacity groups was published. The annual summary report during the years 1931 to 1964 also contained a table showing production by capacity groups. Past copies of this report and other Current Industrial Reports can be found in the Federal Depository Library in your area. These libraries keep Current Industrial Reports (called Facts for Industry, before 1959) permanently available.

RELATED REPORTS

A monthly report is also published in this series. The Bureau of the Census publishes reports on other related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
M20C	Monthly	<i>Confectionery, Including Chocolate Products</i>
<i>Foreign Trade Reports</i>		
FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	John Streeter	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Customer Services (DUSD)	(301) 449-1600
To order Census Bureau microfiche	Maria Brown	(301) 763-5511

ACKNOWLEDGMENTS

This report was prepared in the Industry Division under the direction of Carole A. Klein, Chief, Textiles and Apparel Branch. John Streeter, assisted by Andrea Gass was directly responsible for the review of the data and preparation of the report. Roger Bugenhagen, Chief of the Division, and John R. Wikoff, Assistant Chief for Commodity and Special Programs, provided overall direction and coordination to this project.



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Flour Milling Products



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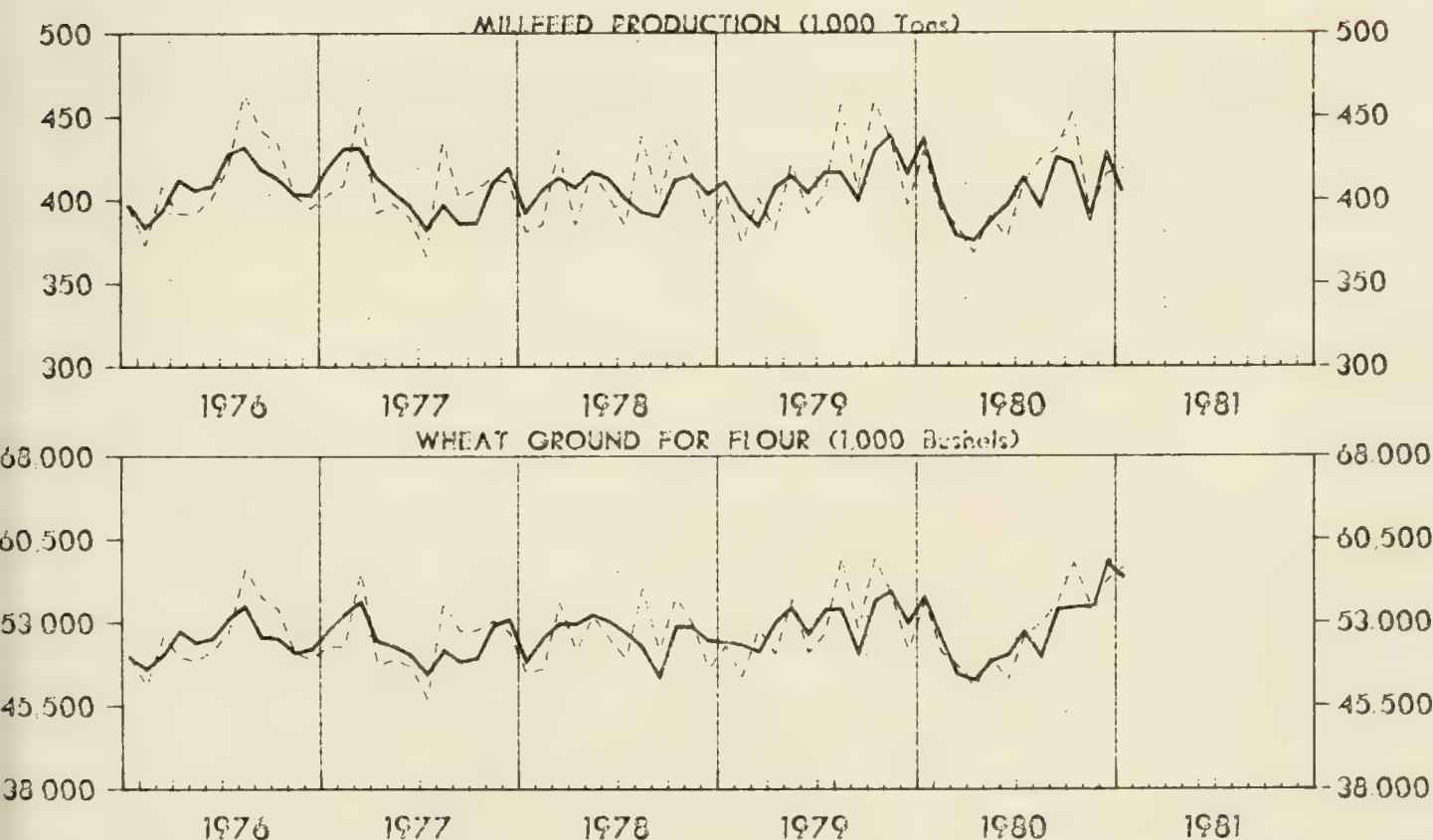
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING 1976 TO 1981

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1981

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1981			
January.....	1,289	405	57,320
1980			
December.....	1,189	429	58,530
November.....	1,085	391	54,537
October.....	1,142	422	54,498
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1981

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1981								
January (21 days).....	1,242	26,077	418,915	57,989	(NA)	1,056	117.6	75.0
1980								
December (22 days).....	1,147	25,232	415,419	56,820	3,842	1,056	108.6	74.0
November (19 days).....	1,197	24,420	392,305	54,582	(NA)	1,056	113.4	74.6
October (23 days).....	1,143	26,285	453,219	58,392	(NA)	1,056	108.2	75.0
September (21 days).....	1,182	24,813	429,851	54,762	3,716	1,056	111.9	75.5
August (21 days).....	1,144	24,025	423,743	52,980	(NA)	1,056	108.3	75.6
July (22 days).....	1,052	23,137	409,644	51,760	(NA)	1,056	99.6	74.5
June (21 days).....	1,017	21,356	377,292	47,786	4,268	1,056	96.5	74.5
May (21 days).....	1,086	22,814	390,185	49,836	(NA)	1,059	102.5	76.3
April (22 days).....	965	21,231	367,709	47,170	(NA)	1,059	91.1	75.0
March (21 days).....	1,055	22,165	384,383	49,104	3,323	1,059	99.6	75.2
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,135	22,739	396,985	50,539	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.2
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8

(NA) Not available.

²Revised by 5 percent or more from previously published figures.¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	January 1981	December 1980	January 1980
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,626	2,474	3,377
20411 55	Straight semolina durum flour.....	M cwt.....	1,169	1,068	1,464
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	299	313	351
20416 18	Rye flour production.....	M cwt.....	136	143	153
20416 18	Rye millfeed production.....	Tons.....	1,458	1,524	2,011
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	12	(NA)
	24 hour capacity.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	January 1981		December 1980		January 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	57,989	26,077	56,820	25,232	55,167	24,654
Middle Atlantic.....	6,639	2,974	7,306	3,293	7,109	3,204
New York.....	5,146	2,315	5,764	2,602	5,751	2,599
North Central.....	28,278	12,751	27,321	12,058	29,417	13,205
Ohio.....	2,919	1,290	2,802	1,223	3,321	1,469
Indiana.....	1,501	660	1,528	663	1,367	594
Illinois.....	3,114	1,389	3,178	1,395	3,227	1,422
Michigan.....	840	364	816	362	840	369
Minnesota.....	6,375	2,893	6,082	2,763	6,587	2,986
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,748	1,278	2,754	1,272	3,401	1,559
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,772	3,092	6,339	2,911	6,799	3,078
South Atlantic.....	3,779	1,660	4,097	1,784	3,818	1,673
East South Central.....	3,364	1,478	2,709	1,215	2,533	1,108
Tennessee.....	2,779	1,227	2,139	941	1,930	847
West South Central.....	4,148	1,894	3,479	1,534	3,777	1,704
Oklahoma.....	1,707	795	1,534	715	1,514	700
Texas.....	1,899	856	1,425	587	1,635	725
Mountain.....	2,854	1,307	3,126	1,434	2,934	1,342
Montana.....	590	269	724	328	639	296
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	8,929	4,013	8,782	3,914	5,579	2,418
Washington.....	1,457	652	1,338	593	1,567	707
Oregon.....	1,054	469	1,019	462	957	433
California and Hawaii.....	6,418	2,892	6,425	2,859	3,055	1,278

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	December 1980	November 1980	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	152	412	2,364
Peru.....	-	8	164
Chile.....	-	26	141
Morocco.....	31	144	539
Egypt.....	20	104	252
Israel.....	1	-	93
Sri Lanka.....	-	44	225
Philippines.....	8	33	343
Other.....	92	53	607
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	608	522	15,013
Mexico.....	5	3	119
Jamaica.....	5	15	304
Egypt.....	255	61	7,314
Saudi Arabia.....	20	312	3,105
Other.....	323	131	4,171
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	131,942	112,166	1,309,532
Mexico.....	3,488	2,350	24,596
Venezuela.....	2,124	984	25,191
Colombia.....	775	-	19,410
Peru.....	2,868	146	24,324
Brazil.....	11,654	2,085	73,859
Chile.....	1,816	5,342	35,414
Portugal.....	2,499	242	22,793
U.S.S.R.....	15,335	22,102	65,001
Morocco.....	-	1,507	18,360
Egypt.....	1,787	4,596	44,616
Bangladesh.....	-	-	40,012
China (Mainland).....	29,644	20,942	224,330
Korean Republic.....	7,749	8,971	71,496
Indonesia.....	914	2,260	28,235
Philippines.....	1,912	3,883	27,507
Nigeria.....	3,218	1,803	36,496
Other.....	46,159	34,953	527,892

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
DECEMBER 1980						
Wheat flour.....	25,232	(NA)	760	9,309	3.0	(NA)
NOVEMBER 1980						
Wheat flour.....	24,420	(NA)	934	12,290	3.8	(NA)

Comparison of SIC codes (domestic output), Schedule B export codes, and TSUSA import codes is as follows:

<u>SIC (domestic output)</u>	<u>Export</u>	<u>Import</u>
20411	131.4010-131.4040	

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1977 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1977 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. The seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour than can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation—There are different methods of valuation for the three types of data:

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501 effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

"Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
M20C	Monthly	<i>Confectionery, Including Chocolate Products</i>
<i>Foreign Trade Reports</i>		
FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	John Streeter	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Customer Services (DUSD)	(301) 449-1600
To order Census Bureau microfiche	Maria Brown	(301) 763-5511

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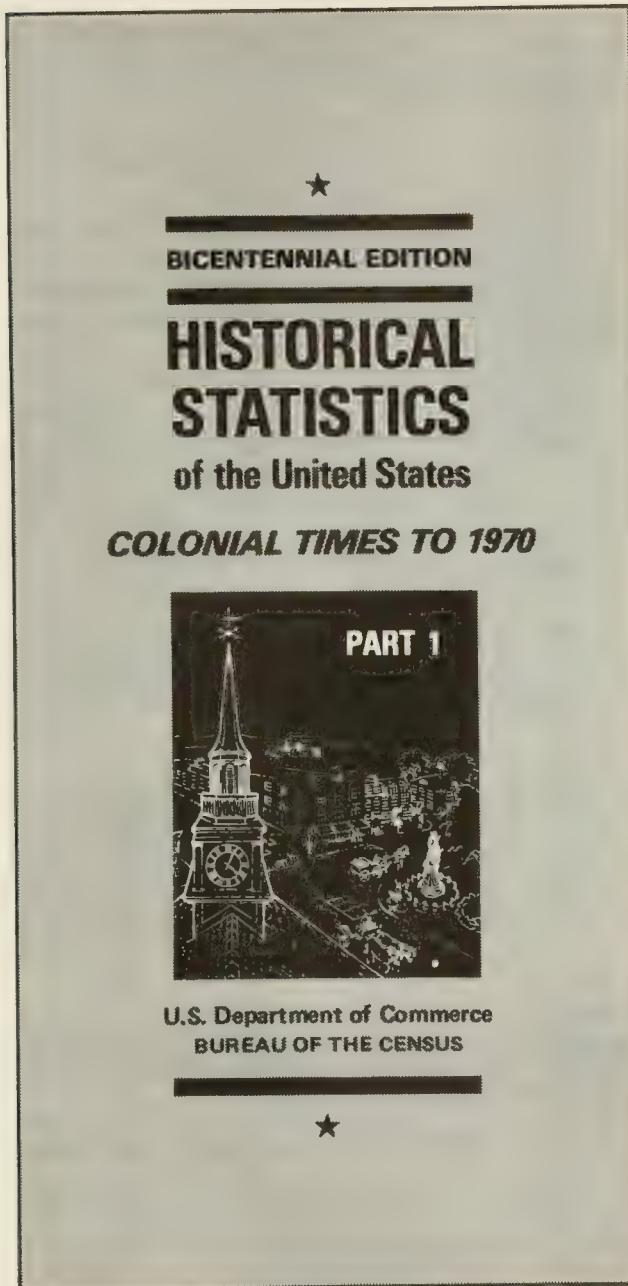
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Flour Milling Products



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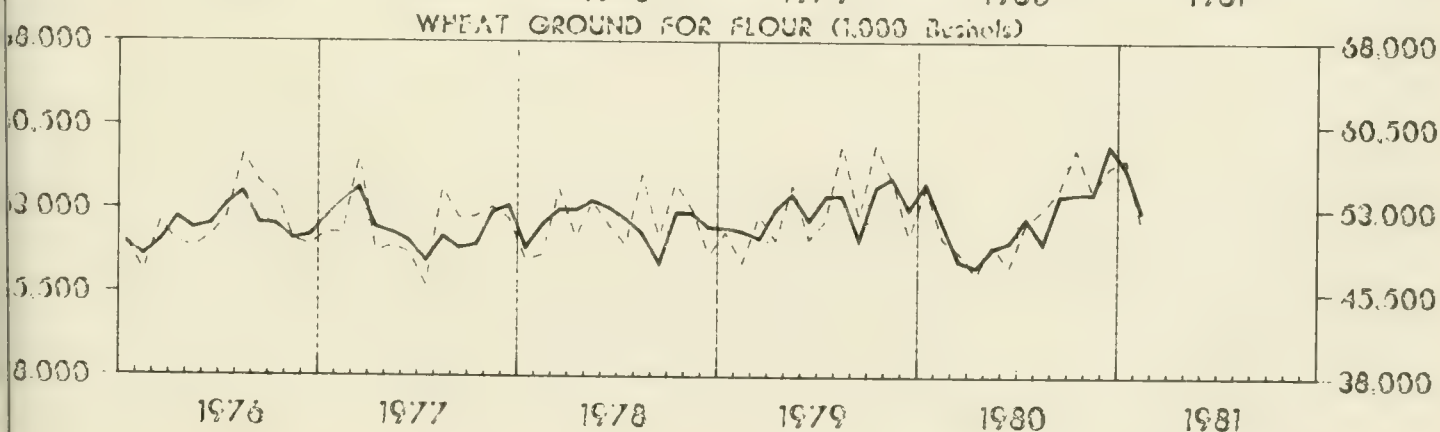
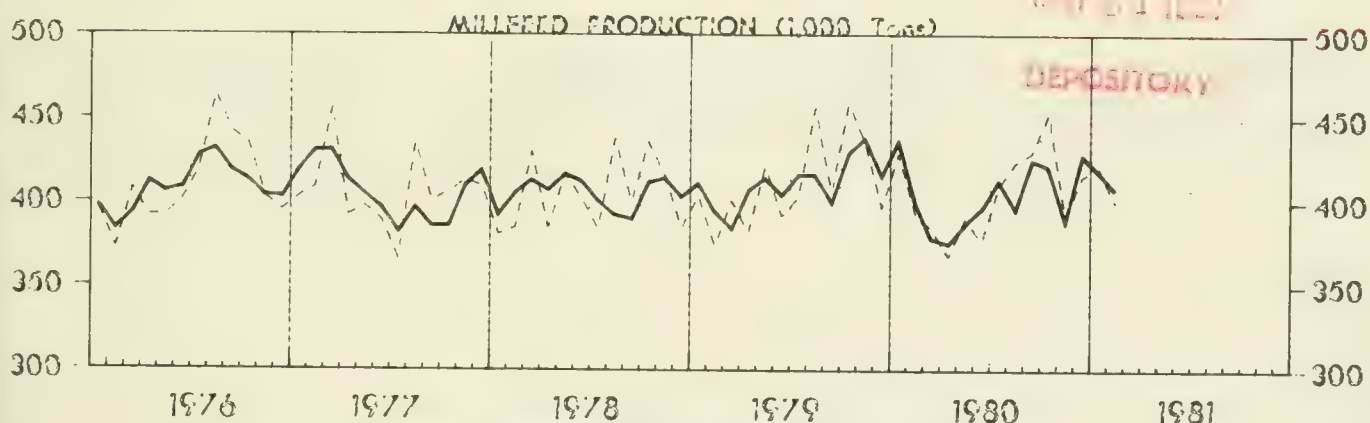
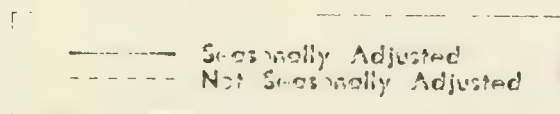
FEBRUARY 1981

M20A(81)-2
Issued April 1981

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING
1976 TO 1981

Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

For sale by Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price, 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1978 TO 1981

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1981			
February.....	1,127	408	52,779
January.....	1,278	419	56,846
1980			
December.....	1,189	429	58,530
November.....	1,085	391	54,537
October.....	1,142	422	54,498
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051
January.....	1,080	412	51,348
1978			
December.....	1,086	404	51,457

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1978 TO 1981

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1981								
February (20 days).....	1,144	22,875	399,850	51,204	(NA)	1,056	108.3	74.5
January (21 days).....	1,231	25,860	420,559	57,513	(NA)	1,056	116.6	74.9
1980								
December (22 days).....	1,147	25,232	415,419	56,820	3,842	1,056	108.6	74.0
November (19 days).....	1,197	24,420	392,305	54,582	(NA)	1,056	113.4	74.6
October (23 days).....	1,143	26,285	453,219	58,392	(NA)	1,056	108.2	75.0
September (21 days).....	1,182	24,813	429,851	54,762	3,716	1,056	111.9	75.5
August (21 days).....	1,144	24,025	423,743	52,980	(NA)	1,056	108.3	75.6
July (22 days).....	1,052	23,137	409,644	51,760	(NA)	1,056	99.6	74.5
June (21 days).....	1,017	21,356	377,292	47,786	4,268	1,056	96.5	74.5
May (21 days).....	1,086	22,814	390,185	49,836	(NA)	1,059	102.5	76.3
April (22 days).....	965	21,231	367,709	47,170	(NA)	1,059	91.1	75.0
March (21 days).....	1,055	22,165	384,383	49,104	3,323	1,059	99.6	75.2
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,135	22,739	396,985	50,539	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.2
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5
January (22 days).....	1,037	22,817	403,584	50,886	(NA)	1,058	98.0	74.7
1978								
December (20 days).....	1,097	21,942	384,942	48,913	3,214	1,058	103.7	74.8

(NA) Not available.

^rRevised by 5 percent or more from previously published figures.¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	February 1981	January 1981	February 1980
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,844	2,809	2,894
20411 55	Straight semolina durum flour.....	M cwt.....	1,217	1,252	1,373
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	267	299	283
20416 11	Rye flour production.....	M cwt.....	122	136	126
20416 18	Rye millfeed production.....	Tons.....	1,347	1,458	1,561
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	15
	24 hour capacity.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	February 1981		January 1981		February 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States.....	51,204	22,875	57,513	25,860	50,352	22,624
Middle Atlantic.....	6,659	2,839	6,615	2,974	6,523	2,945
New York.....	4,929	2,219	5,146	2,315	4,936	2,239
North Central.....	26,917	11,778	28,678	12,910	26,483	11,882
Ohio.....	2,630	1,170	2,919	1,290	2,915	1,293
Indiana.....	1,326	581	1,501	660	1,054	455
Illinois.....	3,215	1,319	3,114	1,389	3,077	1,348
Michigan.....	868	366	840	364	851	375
Minnesota.....	5,671	2,540	6,375	2,893	5,919	2,686
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,536	1,161	2,757	1,269	3,270	1,485
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,621	3,015	7,108	3,238	5,886	2,672
South Atlantic.....	3,836	1,699	3,788	1,682	3,664	1,617
East South Central.....	2,501	1,113	2,528	1,108	2,457	1,078
Tennessee.....	1,928	863	1,943	857	1,873	823
West South Central.....	3,955	1,797	4,153	1,899	3,775	1,712
Oklahoma.....	1,600	742	1,707	795	1,565	727
Texas.....	1,828	818	1,904	861	1,676	750
Mountain.....	2,549	1,165	2,818	1,290	2,584	1,217
Montana.....	567	262	590	269	648	304
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,787	2,146	9,005	4,031	4,866	2,173
Washington.....	1,160	519	1,457	652	1,440	650
Oregon.....	1,095	437	1,219	489	795	365
California and Hawaii.....	2,532	1,190	6,329	2,890	2,631	1,158

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	January 1981	December 1980	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	171	152	171
Peru.....	-	-	-
Chile.....	-	-	-
Morocco.....	19	31	19
Egypt.....	14	20	14
Israel.....	37	1	37
Sri Lanka.....	-	-	-
Philippines.....	40	8	40
Other.....	61	92	61
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	980	608	980
Mexico.....	1	5	1
Jamaica.....	5	5	5
Egypt.....	563	255	563
Saudi Arabia.....	303	20	303
Other.....	108	323	108
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	129,911	131,942	129,911
Mexico.....	3,509	3,468	3,509
Venezuela.....	958	2,124	958
Colombia.....	-	775	-
Peru.....	2,888	2,868	2,888
Brazil.....	5,105	11,654	5,105
Chile.....	3,042	1,816	3,042
Portugal.....	1,095	2,499	1,095
U.S.S.R.....	24,353	15,335	24,353
Morocco.....	-	-	-
Egypt.....	4,465	1,787	4,465
Bangladesh.....	-	-	-
China (Mainland).....	24,960	19,644	24,960
Korean Republic.....	12,113	7,749	12,113
Indonesia.....	3,064	914	3,064
Philippines.....	1,981	1,912	1,981
Nigeria.....	2,377	3,218	2,377
Other.....	40,001	46,159	40,001

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
JANUARY 1981						
Wheat flour.....	25,860	(NA)	1,151	15,389	4.5	(NA)
DECEMBER 1980						
Wheat flour.....	25,404	(NA)	760	9,309	3.0	(NA)

Comparison of SIC codes (domestic output), Schedule B export codes, and TSUSA import codes is as follows:

<u>SIC (domestic output)</u>	<u>Export</u>	<u>Import</u>
20411	131.4010-131.4040	-

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1977 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1977 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. The seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour than can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation—There are different methods of valuation for the three types of data:

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501 effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

"Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
M20C	Monthly	<i>Confectionery, Including Chocolate Products</i>
<i>Foreign Trade Reports</i>		
FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

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3. 158:

Flour Milling Products



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MARCH 1981

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Issued May 1981

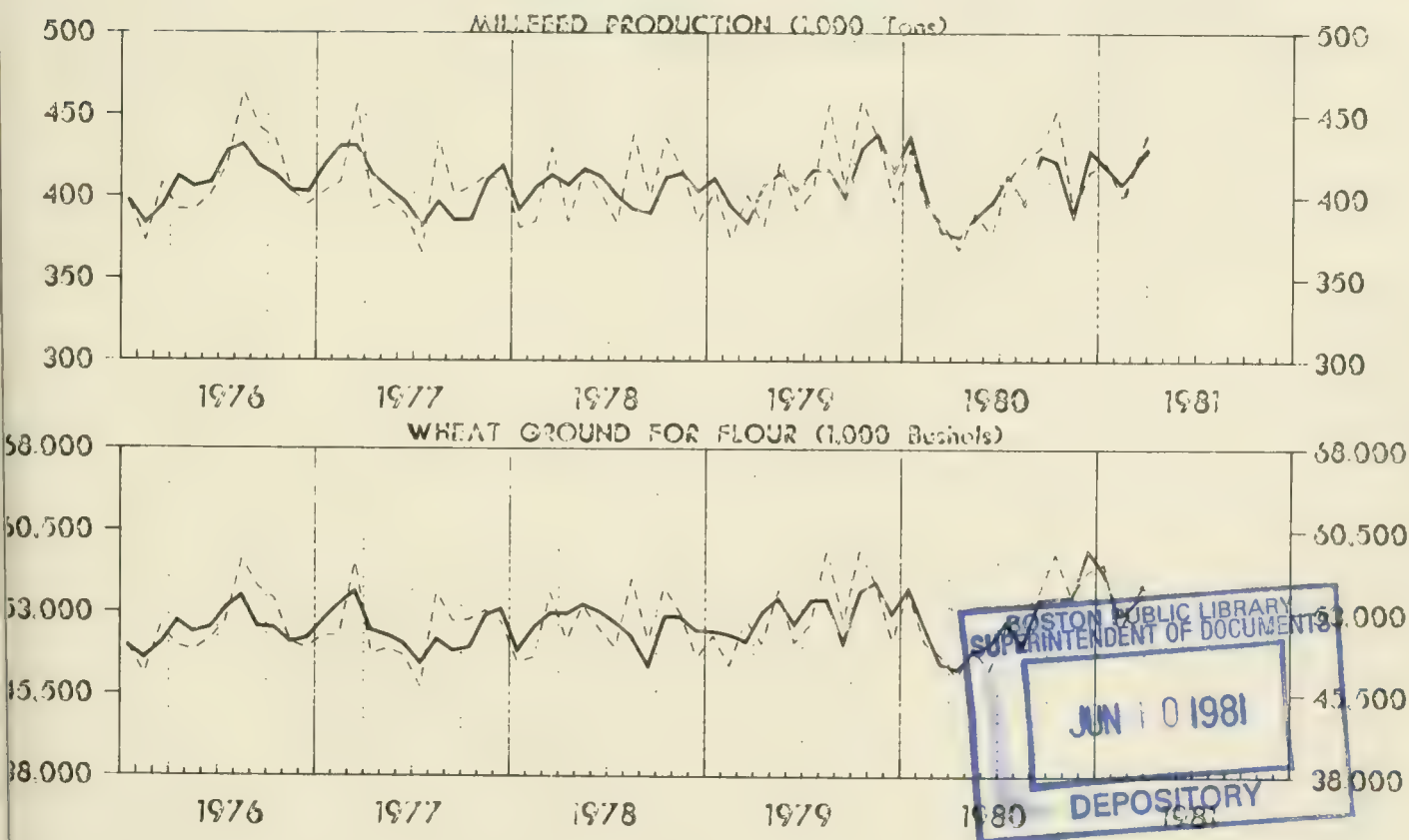
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING 1976 TO 1981

— Seasonally Adjusted
- - - Not Seasonally Adjusted



For address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1981			
March.....	1,115	427	54,589
February.....	1,122	407	52,655
January.....	1,278	419	56,846
1980			
December.....	1,189	429	58,530
November.....	1,085	391	54,537
October.....	1,142	422	54,498
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,116	417	53,134
November.....	1,162	439	55,922
October.....	1,107	430	55,082
September.....	1,109	394	51,587
August.....	1,155	417	54,312
July.....	1,169	417	54,274
June.....	1,123	408	52,118
May.....	1,135	415	54,440
April.....	1,084	408	53,142
March.....	1,095	385	50,453
February.....	1,084	395	51,051

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1981								
March (22 days).....	1,128	24,831	432,714	55,325	3,897	1,058	107.8	74.8
February (20 days).....	1,139	22,787	399,271	51,084	(NA)	1,056	107.8	74.3
January (21 days).....	1,231	25,860	420,559	57,513	(NA)	1,056	116.6	74.9
1980								
December (22 days).....	1,147	25,232	415,419	56,820	3,842	1,056	108.6	74.0
November (19 days).....	1,197	24,420	392,305	54,582	(NA)	1,056	113.4	74.6
October (23 days).....	1,143	26,285	453,219	58,392	(NA)	1,056	108.2	75.0
September (21 days).....	1,182	24,813	429,851	54,762	3,716	1,056	111.9	75.5
August (21 days).....	1,144	24,025	423,743	52,980	(NA)	1,056	108.3	75.6
July (22 days).....	1,052	23,137	409,644	51,760	(NA)	1,056	99.6	74.5
June (21 days).....	1,017	21,356	377,292	47,786	4,268	1,056	96.5	74.5
May (21 days).....	1,086	22,814	390,185	49,836	(NA)	1,059	102.5	76.3
April (22 days).....	965	21,231	367,709	47,170	(NA)	1,059	91.1	75.0
March (21 days).....	1,055	22,165	384,383	49,104	3,323	1,509	99.6	75.2
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,135	22,739	396,985	50,539	3,975	1,059	107.3	75.0
November (21 days).....	1,180	24,778	435,838	55,586	(NA)	1,050	118.0	74.3
October (23 days).....	1,136	26,137	458,795	58,772	(NA)	1,050	108.2	74.2
September (19 days).....	1,225	23,280	407,341	52,258	3,813	1,050	116.7	74.3
August (23 days).....	1,145	26,334	456,627	58,874	(NA)	1,050	109.1	74.6
July (21 days).....	1,119	23,508	403,133	51,995	(NA)	1,050	106.6	75.4
June (22 days).....	1,073	22,536	391,196	50,138	3,895	1,050	102.2	74.9
May (22 days).....	1,117	24,573	421,726	55,093	(NA)	1,057	105.7	74.3
April (21 days).....	1,061	22,291	382,444	50,205	(NA)	1,057	100.4	74.1
March (22 days).....	1,066	23,454	401,433	52,454	3,477	1,057	100.9	74.5
February (20 days).....	1,077	21,542	373,702	48,163	(NA)	1,058	101.8	74.5

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	March 1981	February 1981	March 1980
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,790	2,776	3,378
20411 55	Straight semolina durum flour.....	M cwt.....	1,123	1,184	1,536
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	255	267	274
20416 18	Rye flour production.....	M cwt.....	115	122	125
20416 11	Rye millfeed production.....	Tons.....	1,338	1,347	1,261
	Rye flour stocks ¹	M cwt.....	17	(NA)	22
	24 hour capacity.....	..do.....	10	9	11

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE
(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	March 1981		February 1981		March 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat for flour production
United States.....	55,325	24,831	51,084	22,787	49,104	22,165
Middle Atlantic.....	6,842	3,078	6,649	2,968	6,411	2,890
New York.....	5,264	2,373	4,929	2,219	5,073	2,286
North Central.....	29,303	13,114	26,918	11,960	25,336	11,395
Ohio.....	2,846	1,366	2,628	1,165	2,990	1,332
Indiana.....	1,656	700	1,326	581	1,332	579
Illinois.....	3,365	1,509	3,215	1,309	2,866	1,279
Michigan.....	970	429	851	380	859	375
Minnesota.....	6,185	2,820	5,671	2,540	6,302	2,853
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,774	1,293	2,536	1,161	3,093	1,426
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	7,211	3,264	6,621	3,015	4,847	2,193
South Atlantic.....	3,990	1,762	3,839	1,690	3,419	1,498
East South Central.....	2,563	1,144	2,501	1,113	2,426	1,070
Tennessee.....	1,987	893	1,928	863	1,855	815
West South Central.....	4,561	2,072	3,955	1,797	3,531	1,604
Oklahoma.....	1,801	840	1,600	742	1,513	706
Texas.....	2,110	931	1,828	818	1,468	651
Mountain.....	2,854	1,305	2,549	1,165	2,708	1,252
Montana.....	659	302	567	262	629	297
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,212	2,356	4,673	2,094	5,273	2,456
Washington.....	1,234	555	1,160	519	1,291	591
Oregon.....	1,162	470	989	388	1,030	473
California and Hawaii.....	2,887	1,308	2,524	1,187	2,952	1,392

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	February 1981	January 1981	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	367	171	539
Peru.....	22	-	23
Chile.....	14	-	14
Morocco.....	137	19	156
Egypt.....	43	14	57
Israel.....	-	37	37
Sri Lanka.....	-	-	-
Philippines.....	43	40	83
Other.....	108	61	169
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	1,896	980	2,876
Mexico.....	-	1	1
Jamaica.....	24	5	29
Egypt.....	1,032	563	1,594
Saudi Arabia.....	426	303	728
Other.....	414	108	524
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	124,397	129,911	254,308
Mexico.....	3,524	3,509	7,033
Venezuela.....	3,312	958	4,271
Colombia.....	2,290	-	2,290
Peru.....	3,727	2,888	6,615
Brazil.....	17,844	5,105	22,949
Chile.....	1,066	3,042	4,109
Portugal.....	3,321	1,095	4,417
U.S.S.R.....	18,942	24,353	43,294
Morocco.....	18,942	-	-
Egypt.....	8,672	4,465	13,137
Bangladesh.....	-	-	-
China (Mainland).....	15,891	24,960	40,851
Korean Republic.....	4,937	12,113	17,050
Indonesia.....	1,330	3,064	4,394
Philippines.....	-	1,981	1,981
Nigeria.....	4,146	2,377	6,522
Other.....	35,395	40,001	75,395

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
FEBRUARY 1981						
Wheat flour.....	22,782	(NA)	2,263	30,744	9.9	(NA)
JANUARY 1981						
Wheat flour.....	25,860	(NA)	1,151	15,389	4.5	(NA)

Comparison of SIC codes (domestic output), Schedule B export codes, and TSUSA import codes is as follows:

<u>SIC (domestic output)</u>	<u>Export</u>	<u>Import</u>
20411	131.4010-131.4040	-

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1977 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1977 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. The seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour than can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation—There are different methods of valuation for the three types of data:

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501 effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

"Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
M20C	Monthly	<i>Confectionery, Including Chocolate Products</i>
<i>Foreign Trade Reports</i>		
FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	John Streeter	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Customer Services (DUSD)	(301) 449-1600
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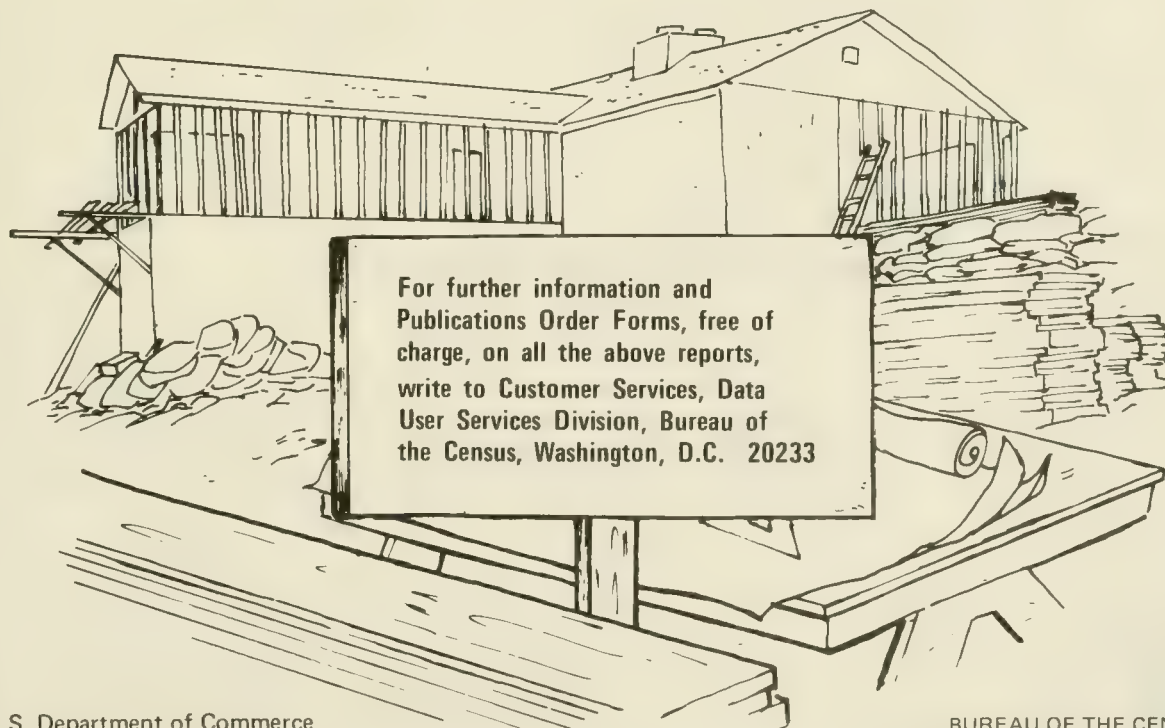
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Flour Milling Products



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APRIL 1981

M20A(81)-4
Issued May 1981

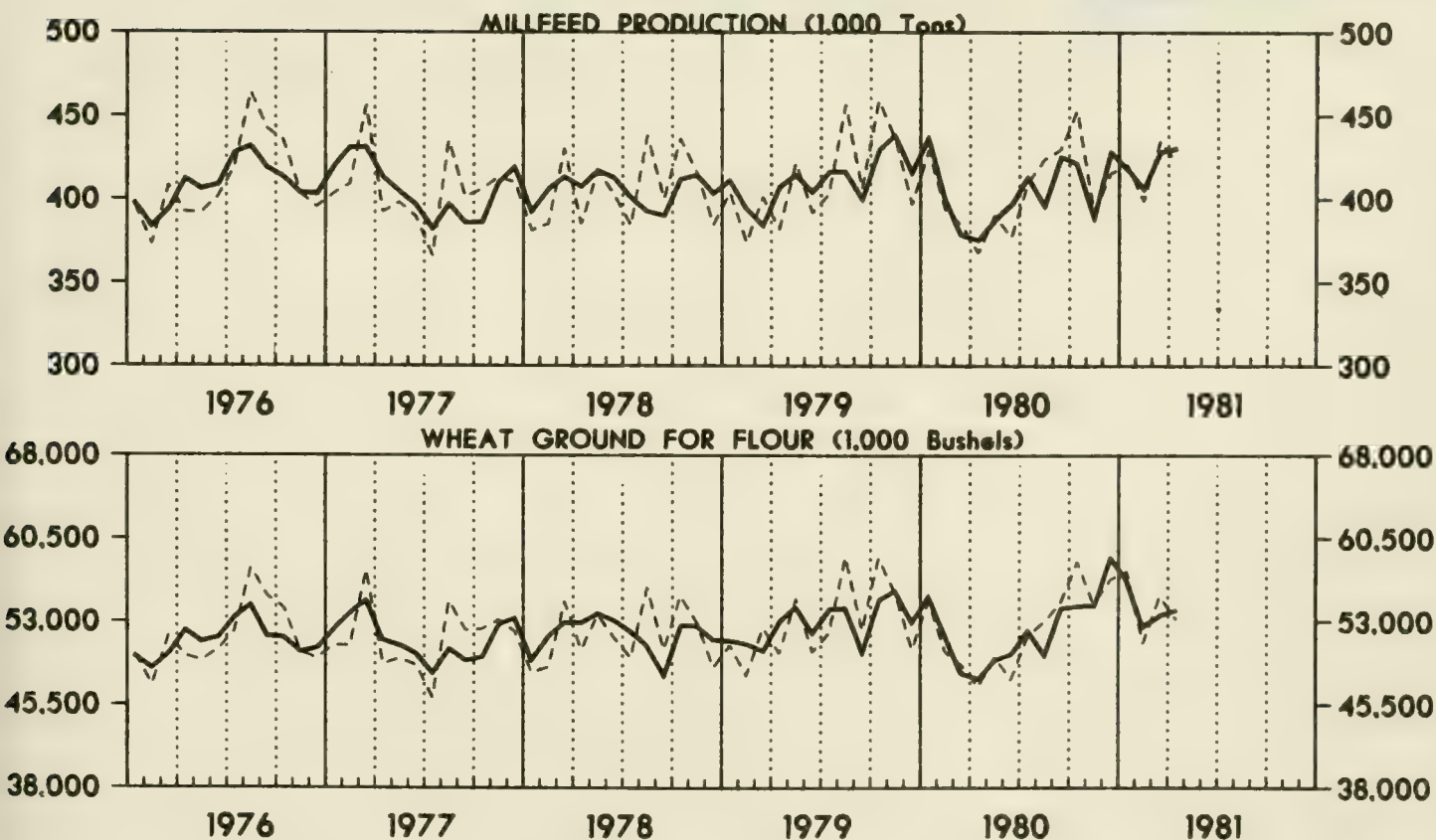
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of this survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1976 TO 1981

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1981			
April.....	1,123	431	54,096
March.....	1,122	429	53,644
February.....	1,122	407	52,655
January.....	1,278	419	56,846
1980			
December.....	1,189	429	58,530
November.....	1,085	391	54,537
October.....	1,142	422	54,498
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,120	423	53,268
November.....	1,148	428	54,545
October.....	1,123	426	54,856
September.....	1,121	410	52,674
August.....	1,150	418	54,184
July.....	1,162	418	53,933
June.....	1,114	407	52,819
May.....	1,124	411	53,696
April.....	1,087	404	52,278
March.....	1,089	387	50,874

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1981								
April (22 days).....	1,085	23,880	422,046	53,216	(NA)	1,056	102.8	74.8
March (22 days).....	1,135	24,959	434,910	55,310	3,897	1,056	107.5	75.2
February (20 days).....	1,139	22,787	399,271	51,084	(NA)	1,056	107.8	74.3
January (21 days).....	1,231	25,860	420,559	57,513	(NA)	1,056	116.6	74.9
1980								
December (22 days).....	1,147	25,232	415,419	56,820	3,842	1,056	108.6	74.0
November (19 days).....	1,197	24,420	392,305	54,582	(NA)	1,056	113.4	74.6
October (23 days).....	1,143	26,285	453,219	58,392	(NA)	1,056	108.2	75.0
September (21 days).....	1,182	24,813	429,851	54,762	3,716	1,056	111.9	75.5
August (21 days).....	1,144	24,025	423,743	52,980	(NA)	1,056	108.3	75.6
July (22 days).....	1,052	23,137	409,644	51,760	(NA)	1,056	99.6	74.5
June (21 days).....	1,017	21,356	377,292	47,786	4,268	1,056	96.5	74.5
May (21 days).....	1,086	22,814	390,185	49,836	(NA)	1,059	102.5	76.3
April (22 days).....	965	21,231	367,709	47,170	(NA)	1,059	91.1	75.0
March (21 days).....	1,055	22,165	384,383	49,104	3,323	1,059	99.6	75.2
February (21 days).....	1,077	22,624	394,095	50,352	(NA)	1,059	101.7	74.9
January (22 days).....	1,116	24,553	429,495	54,955	(NA)	1,059	105.4	74.5
1979								
December (20 days).....	1,137	22,744	396,985	50,643	3,975	1,059	107.3	74.9
November (21 days).....	1,180	24,783	435,838	55,710	(NA)	1,050	118.0	74.1
October (23 days).....	1,137	26,143	458,795	58,904	(NA)	1,050	108.2	74.0
September (19 days).....	1,226	23,285	407,341	52,375	3,813	1,050	116.7	74.1
August (23 days).....	1,145	26,340	456,627	59,006	(NA)	1,050	109.1	74.4
July (21 days).....	1,120	23,513	403,133	52,111	(NA)	1,050	106.6	75.2
June (22 days).....	1,025	22,541	391,196	50,250	3,895	1,050	102.2	74.8
May (22 days).....	1,117	24,578	421,726	55,216	(NA)	1,057	105.7	74.2
April (21 days).....	1,062	22,296	382,444	50,319	(NA)	1,057	100.4	73.8
March (22 days).....	1,066	23,459	401,433	52,571	3,477	1,057	100.9	74.4

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	April 1981	March 1981	April 1980
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.....	2,333	2,790	2,336
20411 53	Straight semolina durum flour.....	M cwt.....	951	1,123	1,033
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.....	307	255	248
20416 11	Rye flour production.....	M cwt.....	139	115	114
20416 18	Rye millfeed production.....	Tons.....	1,636	1,338	1,296
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	17	(NA)
	24 hour capacity.....	..do.....	11	10	11

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE

(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area ¹	April 1981		March 1981		April 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat for flour production
United States.....	53,216	23,880	55,310	24,959	47,170	21,231
Middle Atlantic.....	6,749	13,031	6,842	3,078	6,254	2,824
New York.....	5,285	2,375	5,264	2,373	4,932	2,217
North Central.....	27,817	12,530	29,173	13,206	23,376	10,508
Ohio.....	2,718	1,203	2,846	1,366	2,631	1,164
Indiana.....	1,380	608	1,656	700	1,295	576
Illinois.....	3,204	1,437	3,431	1,522	2,653	1,180
Michigan.....	950	413	968	429	788	341
Minnesota.....	5,898	2,667	6,144	2,781	5,778	2,611
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,650	1,220	2,774	1,274	2,630	1,208
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	7,237	3,297	7,215	3,289	5,091	2,307
South Atlantic.....	3,978	1,752	3,990	1,762	3,654	1,605
East South Central.....	2,660	1,148	2,580	1,139	2,410	1,059
Tennessee.....	2,040	882	2,004	888	1,855	810
West South Central.....	4,083	1,835	4,558	2,071	3,350	1,518
Oklahoma.....	1,562	730	1,801	840	1,337	621
Texas.....	1,865	813	2,107	940	1,418	629
Mountain.....	2,770	1,265	2,854	1,305	2,798	1,297
Montana.....	591	269	659	302	664	310
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,159	2,319	5,313	2,398	5,328	2,420
Washington.....	1,326	591	1,234	555	1,457	655
Oregon.....	1,204	487	1,252	509	867	400
California and Hawaii.....	2,629	1,241	2,827	1,334	3,004	1,377

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

¹The following is the breakdown of geographic areas used by the Census Bureau. Northeast Region: New England Division: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; Middle Atlantic Division: New York, New Jersey, and Pennsylvania. North Central Region: East North Central Division: Ohio, Indiana, Illinois, Michigan, and Wisconsin; West North Central Division: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. South Region: South Atlantic Division: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; East South Central Division: Kentucky, Tennessee, Alabama, and Mississippi; West South Central Division: Arkansas, Louisiana, Oklahoma, and Texas. West Region: Mountain Division: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Nevada, and Utah; Pacific Division: Washington, Oregon, California, Alaska, and Hawaii.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	March 1981	February 1981	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	530	367	1,069
Peru.....	6	22	29
Chile.....	48	14	62
Morocco.....	56	137	212
Egypt.....	119	43	176
Israel.....	-	-	37
Sri Lanka.....	40	-	40
Philippines.....	-	43	83
Other.....	261	108	430
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	2,241	1,896	5,117
Mexico.....	50	-	51
Jamaica.....	32	24	61
Egypt.....	1,944	1,032	3,538
Saudi Arabia.....	93	426	821
Other.....	122	414	646
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	128,770	124,397	383,079
Mexico.....	8,783	3,524	15,816
Venezuela.....	3,286	3,312	7,557
Colombia.....	772	2,290	3,062
Peru.....	3,679	3,727	10,294
Brazil.....	6,171	17,844	29,121
Chile.....	2,331	1,066	6,440
Portugal.....	2,418	3,321	6,834
U.S.S.R.....	7,249	18,942	50,544
Morocco.....	-	-	-
Egypt.....	8,658	8,672	21,795
Bangladesh.....	-	-	-
China (Mainland).....	27,670	15,891	68,521
Korean Republic.....	3,743	4,937	20,793
Indonesia.....	2,412	1,330	6,807
Philippines.....	1,977	-	3,958
Nigeria.....	3,325	4,146	9,848
Other.....	46,296	35,395	121,689

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
MARCH 1981						
Wheat flour.....	24,959	(NA)	2,771	29,744	11.1	(NA)
FEBRUARY 1981						
Wheat flour.....	22,787	(NA)	2,263	30,744	9.9	(NA)

Comparison of SIC codes (domestic output), Schedule B export codes, and TSUSA import codes is as follows:

<u>SIC (domestic output)</u>	<u>Export</u>	<u>Import</u>
20411	131.4010-131.4040	-

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

DESCRIPTION OF SURVEY

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Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1977 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1977 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. The seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour than can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation—There are different methods of valuation for the three types of data:

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501 effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

"Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
M20C	Monthly	<i>Confectionery, Including Chocolate Products</i>
<i>Foreign Trade Reports</i>		
FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	John Streeter	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Customer Services (DUSD)	(301) 449-1600
To order Census Bureau microfiche	Maria Brown	(301) 763-5511

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FOR: PLACES 10,000-50,000
FOR: PLACES 2500-10,000
FOR: COUNTIES
FOR: RURAL NONFARM POPULATION OF
COUNTIES
FOR: RURAL FARM POPULATION OF COUNTIES
FOR: SMSA, COMPONENT COUNTIES, CENTRAL
CITIES AND OTHER PLACES 25,000+ CENSUS
TRACTS
INCOME OF FAMILY (12) BY AGE OF HEAD (6) BY
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Flour Milling Products



U.S. Department of Commerce
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MAY 1981

M20A(81)-5
Issued July 1981

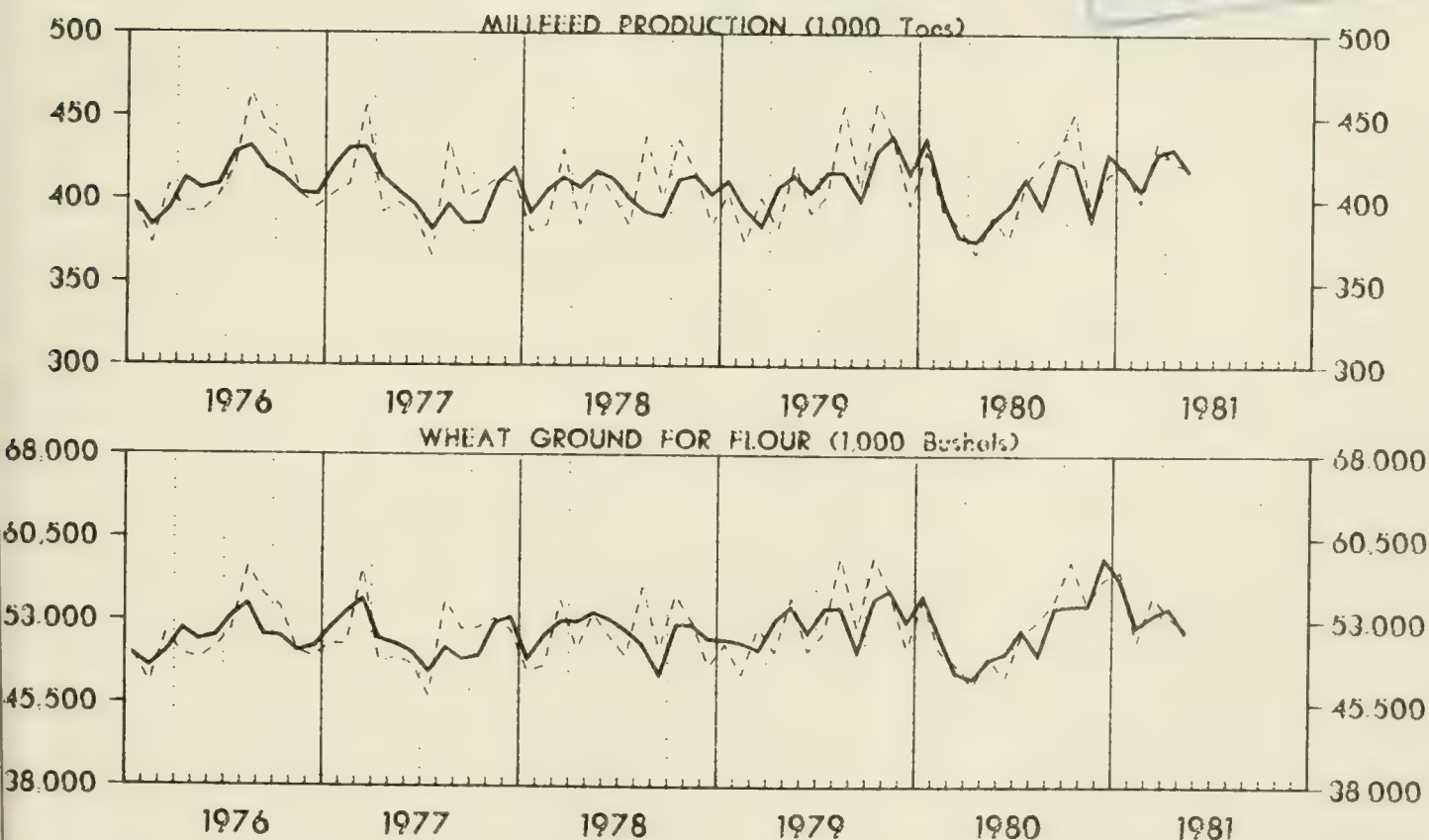
The statistics in this publication are based on a survey of flour mills and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of the survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING 1976 TO 1981

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1981			
May.....	1,163	418	52,020
April.....	1,127	432	54,285
March.....	1,122	429	53,644
February.....	1,122	407	52,655
January.....	1,278	419	56,846
1980			
December.....	1,189	429	58,530
November.....	1,085	391	54,537
October.....	1,142	422	54,498
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,120	423	53,268
November.....	1,148	428	54,545
October.....	1,123	426	54,856
September.....	1,121	410	52,674
August.....	1,150	418	54,184
July.....	1,162	418	53,933
June.....	1,114	407	52,819
May.....	1,124	411	53,696
April.....	1,087	404	52,278

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production (1,000 cwt.)		Mill feed production (tons)	Wheat ground for flour (1,000 bushels)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)	Wheat flour mill stocks ² (1,000 cwt.)
	Average per working day ¹	Calendar month total						
1981								
May (20 days).....	1,173	23,462	420,091	52,228	1,056	111.1	74.9	(NA)
April (22 days).....	1,089	23,967	423,747	53,402	1,056	103.1	74.8	(NA)
March (22 days).....	1,135	24,959	434,910	55,310	1,056	107.5	75.2	3,897
February (20 days).....	1,139	22,787	399,271	51,084	1,056	107.8	74.3	(NA)
January (21 days).....	1,231	25,860	420,559	57,513	1,056	116.6	74.9	(NA)
1980								
December (22 days).....	1,147	25,232	415,419	56,820	1,056	108.6	74.0	3,842
November (19 days).....	1,197	24,420	392,305	54,582	1,056	113.4	74.6	(NA)
October (23 days).....	1,143	26,285	453,219	58,392	1,056	108.2	75.0	(NA)
September (21 days).....	1,182	24,813	429,851	54,762	1,056	111.9	75.5	3,716
August (21 days).....	1,144	24,025	423,743	52,980	1,056	108.3	75.6	(NA)
July (22 days).....	1,052	23,137	409,644	51,760	1,056	99.6	74.5	(NA)
June (21 days).....	1,017	21,356	377,292	47,786	1,056	96.5	74.5	4,268
May (21 days).....	1,086	22,814	390,185	49,836	1,059	102.5	76.3	(NA)
April (22 days).....	965	21,231	367,709	47,170	1,059	91.1	75.0	(NA)
March (21 days).....	1,055	22,165	384,383	49,104	1,059	99.6	75.2	3,323
February (21 days).....	1,077	22,624	394,095	50,352	1,059	101.7	74.9	(NA)
January (22 days).....	1,116	24,553	429,495	54,955	1,059	105.4	74.5	(NA)
1979								
December (20 days).....	1,137	22,744	396,985	50,643	1,059	107.3	74.9	3,975
November (21 days).....	1,180	24,783	435,838	55,710	1,050	118.0	74.1	(NA)
October (23 days).....	1,137	26,143	458,795	58,904	1,050	108.2	74.0	(NA)
September (19 days).....	1,226	23,285	407,341	52,375	1,050	116.7	74.1	3,813
August (23 days).....	1,145	26,340	456,627	59,006	1,050	109.1	74.4	(NA)
July (21 days).....	1,120	23,513	403,133	52,111	1,050	106.6	75.2	(NA)
June (22 days).....	1,025	22,541	391,196	50,250	1,050	102.2	74.8	3,895
May (22 days).....	1,117	24,578	421,726	55,216	1,057	105.7	74.2	(NA)
April (21 days).....	1,062	22,296	382,444	50,319	1,057	100.4	73.8	(NA)

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	May 1981	April 1981	May 1980
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,160	2,333	2,721
20411 55	Straight semolina durum flour.....	M cwt.....	880	953	1,193
	Blended semolina durum flour.....	M cwt.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	277	307	283
20416 18	Rye flour production.....	M cwt.....	121	139	127
20416 18	Rye millfeed production.....	Tons.....	1,414	1,636	1,508
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity.....	M cwt.....	10	10	11

Note: These data exclude flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE

Geographic area ¹	May 1981		April 1981		May 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)
United States.....	52,228	23,462	53,402	23,967	49,836	22,814
Middle Atlantic.....	6,892	3,102	6,749	3,031	6,844	3,325
New York.....	5,157	2,310	5,285	2,375	5,294	2,382
North Central.....	26,615	11,952	27,860	12,550	25,431	11,441
Ohio.....	2,544	1,130	2,718	1,203	2,751	1,225
Indiana.....	1,376	603	1,380	608	1,236	538
Illinois.....	3,259	1,432	3,204	1,437	2,897	1,280
Michigan.....	852	379	950	413	801	346
Minnesota.....	5,236	2,377	5,898	2,667	5,557	2,519
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,638	1,210	2,650	1,220	2,744	1,254
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,427	2,919	7,280	3,317	5,998	2,736
South Atlantic.....	4,020	1,785	4,034	1,773	3,723	1,643
East South Central.....	2,560	1,119	2,660	1,148	2,473	1,133
Tennessee.....	1,917	847	2,040	882	1,922	889
West South Central.....	4,178	1,888	4,123	1,851	3,470	1,599
Oklahoma.....	1,604	742	1,562	730	1,393	649
Texas.....	1,966	872	1,905	829	1,566	720
Mountain.....	2,765	1,277	2,770	1,265	2,578	1,189
Montana.....	705	330	591	269	594	276
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,198	2,339	5,206	2,349	5,317	2,484
Washington.....	1,252	559	1,372	611	1,564	707
Oregon.....	1,017	404	1,204	494	931	423
California and Hawaii.....	2,929	1,376	2,630	1,244	2,822	1,354

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

¹The following is the breakdown of geographic areas used by the Census Bureau. Northeast Region: New England Division: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; Middle Atlantic Division: New York, New Jersey, and Pennsylvania. North Central Region: East North Central Division: Ohio, Indiana, Illinois, Michigan, and Wisconsin; West North Central Division: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. South Region: South Atlantic Division: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; East South Central Division: Kentucky, Tennessee, Alabama, and Mississippi; West South Central Division: Arkansas, Louisiana, Oklahoma, and Texas. West Region: Mountain Division: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Nevada, and Utah; Pacific Division: Washington, Oregon, California, Alaska, and Hawaii.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	April 1981	March 1981	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	280	530	1,349
Peru.....	16	6	45
Chile.....	9	48	71
Morocco.....	154	56	366
Egypt.....	-	119	176
Israel.....	4	-	41
Sri Lanka.....	-	40	40
Philippines.....	50	-	133
Other.....	47	261	477
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	2,932	2,241	8,049
Mexico.....	4	50	55
Jamaica.....	30	32	91
Egypt.....	1,815	1,944	5,353
Saudi Arabia.....	214	93	1,036
Other.....	869	122	1,514
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	127,652	128,770	510,731
Mexico.....	4,580	8,783	20,396
Venezuela.....	924	3,286	8,481
Colombia.....	1,203	772	4,265
Peru.....	2,064	3,679	12,358
Brazil.....	8,392	6,171	37,512
Chile.....	2,849	2,331	9,289
Portugal.....	2,229	2,418	9,063
U.S.S.R.....	10,283	7,249	60,827
Morocco.....	-	-	-
Egypt.....	9,116	8,658	30,911
Bangladesh.....	-	-	-
China (Mainland).....	17,707	27,670	86,228
Korean Republic.....	10,750	3,743	31,543
Indonesia.....	919	2,412	7,725
Philippines.....	4,898	1,977	8,856
Nigeria.....	4,226	3,325	14,073
Other.....	47,512	46,296	169,204

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
APRIL 1981						
Wheat flour.....	23,967	(NA)	3,212	38,075	13.4	(NA)
MARCH 1981						
Wheat flour.....	24,959	(NA)	2,771	29,744	11.1	(NA)

Comparison of SIC codes (domestic output) and Schedule B export codes is as follows:

SIC (domestic output)

20411

Export

131.4010-131.4040

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 establishments, representing 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1977 Census of Manufactures. The survey mail panel consists of mills with a daily capacity of over 400 sacks of flour. Data for approximately 200 small establishments are estimated based upon their 1977 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for establishments in the mail panel for which reports were not received in time for tabulation as well as for the small establishments excluded from the mail panel. Missing figures for companies in the mail panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for the small establishments excluded from the monthly mail panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonmail cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. The seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour than can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation—There are different methods of valuation for the three types of data:

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501 effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

"Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
M20C	Monthly	<i>Confectionery, Including Chocolate Products</i>
<i>Foreign Trade Reports</i>		
FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	John Streeter	(301) 763-780
Foreign Trade publications	Juanita Noone	(301) 763-514
To order a Census Bureau publication	Customer Services (DUSD)	(301) 449-160
To order Census Bureau microfiche	Maria Brown	(301) 763-551

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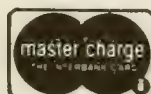
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analysis, and input-output charts for major industries. The 1981 edition has been enlarged to include sections on energy and mining.

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3. 158:

Flour Milling Products



U.S. Department of Commerce
BUREAU OF THE CENSUS

JUNE 1981

M20A(81)-6
Issued August 1981

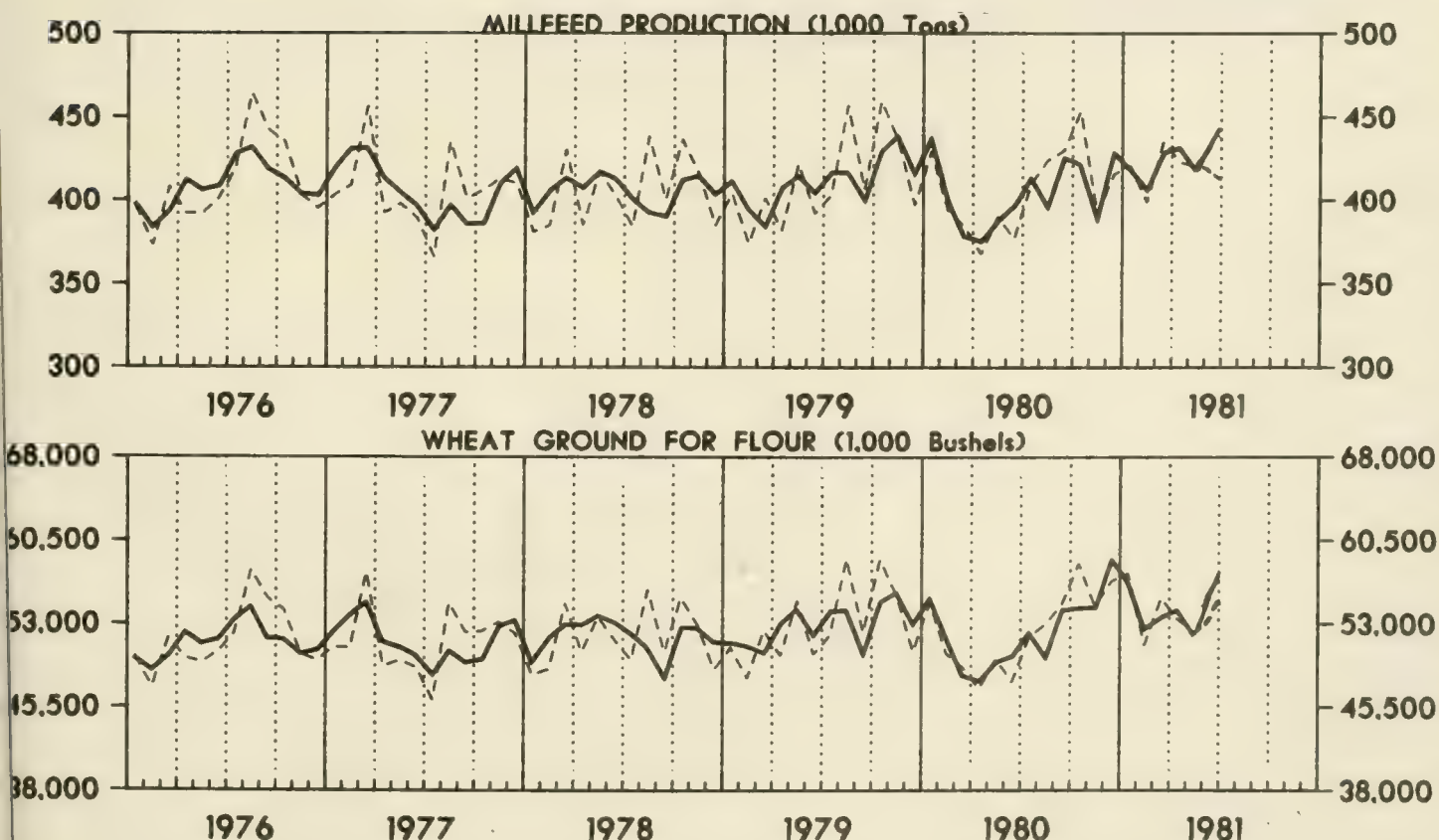
The statistics in this publication are based on a survey of flour mills and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of the survey appears on page 7.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING, 1976 TO 1981

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

For sale by Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price, 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1981			
June.....	1,113	437	55,145
May.....	1,161	418	51,976
April.....	1,127	432	54,285
March.....	1,122	429	53,644
February.....	1,122	407	52,655
January.....	1,278	419	56,846
1980			
December.....	1,189	429	58,530
November.....	1,085	391	54,537
October.....	1,142	422	54,498
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,120	423	53,268
November.....	1,148	428	54,545
October.....	1,123	426	54,856
September.....	1,121	410	52,674
August.....	1,150	418	54,184
July.....	1,162	418	53,933
June.....	1,114	407	52,819
May.....	1,124	411	53,696

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED 1979 to 1981

Month and year	Wheat flour production (1,000 cwt.)		Mill feed production (tons)	Wheat ground for flour (1,000 bushels)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)	Wheat flour mill stocks ² (1,000 cwt.)
	Average per working day ¹	Calendar month total						
1981								
June (22 days).....	1,068	23,499	414,684	52,523	1,061	100.7	74.6	3,895
May (20 days).....	1,171	23,421	420,038	52,184	1,056	110.9	74.8	(NA)
April (22 days).....	1,089	23,967	423,747	53,402	1,056	103.1	74.8	(NA)
March (22 days).....	1,135	24,959	434,910	55,310	1,056	107.5	75.2	3,897
February (20 days).....	1,139	22,787	399,271	51,084	1,056	107.8	74.3	(NA)
January (21 days).....	1,231	25,860	420,559	57,513	1,056	116.6	74.9	(NA)
1980								
December (22 days).....	1,147	25,232	415,419	56,820	1,056	108.6	74.0	3,842
November (19 days).....	1,197	24,420	392,305	54,582	1,056	113.4	74.6	(NA)
October (23 days).....	1,143	26,285	453,219	58,392	1,056	108.2	75.0	(NA)
September (21 days).....	1,182	24,813	429,851	54,762	1,056	111.9	75.5	3,716
August (21 days).....	1,144	24,025	423,743	52,980	1,056	108.3	75.6	(NA)
July (22 days).....	1,052	23,137	409,644	51,760	1,056	99.6	74.5	(NA)
June (21 days).....	1,017	21,356	377,292	47,786	1,056	96.5	74.5	4,268
May (21 days).....	1,086	22,814	390,185	49,836	1,059	102.5	76.3	(NA)
April (22 days).....	965	21,231	367,709	47,170	1,059	91.1	75.0	(NA)
March (21 days).....	1,055	22,165	384,383	49,104	1,059	99.6	75.2	3,323
February (21 days).....	1,077	22,624	394,095	50,352	1,059	101.7	74.9	(NA)
January (22 days).....	1,116	24,553	429,495	54,955	1,059	105.4	74.5	(NA)
1979								
December (20 days).....	1,137	22,744	396,985	50,643	1,059	107.3	74.9	3,975
November (21 days).....	1,180	24,783	435,838	55,710	1,050	118.0	74.1	(NA)
October (23 days).....	1,137	26,143	458,795	58,904	1,050	108.2	74.0	(NA)
September (19 days).....	1,226	23,285	407,341	52,375	1,050	116.7	74.1	3,813
August (23 days).....	1,145	26,340	456,627	59,006	1,050	109.1	74.4	(NA)
July (21 days).....	1,120	23,513	403,133	52,111	1,050	106.6	75.2	(NA)
June (22 days).....	1,025	22,541	391,196	50,250	1,050	102.2	74.8	3,895
May (22 days).....	1,117	24,578	421,726	55,216	1,057	105.7	74.2	(NA)
(NA) Not available								

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	June 1981	June 1980	June 1979
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,097	2,161	2,161
20411 55	Straight semolina durum flour.....	M cwt.....	908	880	880
	Blended semolina durum flour.....	M cwt.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	292	277	262
20416 11	Rye flour production.....	M cwt.....	134	121	118
20416 18	Rye millfeed production.....	Tons.....	1,423	1,416	1,231
20416 11	Rye flour stocks ¹	M cwt.....	27	(NA)	12
	24 hour capacity.....	M cwt.....	9	10	11

Note: These data exclude flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE

Geographic area ¹	June 1981		May 1981		June 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)
United States.....	52,523	23,499	52,184	23,421	47,786	21,356
Middle Atlantic.....	7,217	3,242	6,828	3,052	6,684	2,962
New York.....	5,744	2,588	5,048	2,260	5,219	2,337
North Central.....	26,716	11,874	26,603	11,948	24,171	10,833
Ohio.....	2,825	1,242	2,544	1,130	2,341	1,031
Indiana.....	1,512	666	1,376	603	1,402	608
Illinois.....	3,267	1,438	3,269	1,436	2,713	1,192
Michigan.....	791	347	852	379	774	336
Minnesota.....	5,358	2,421	5,239	2,379	5,469	2,467
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,626	1,193	2,638	1,210	2,641	1,219
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,436	2,922	6,420	2,915	5,840	2,641
South Atlantic.....	4,061	1,771	4,025	1,787	3,454	1,504
East South Central.....	2,619	1,162	2,559	1,119	2,362	1,022
Tennessee.....	2,038	915	1,916	847	1,821	786
West South Central.....	4,131	1,942	4,181	1,887	3,598	1,638
Oklahoma.....	1,622	744	1,604	742	1,543	716
Texas.....	1,941	945	1,971	874	1,426	643
Mountain.....	2,750	1,252	2,800	1,295	2,524	1,167
Montana.....	577	259	712	334	527	248
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,027	2,256	5,188	2,333	4,993	2,230
Washington.....	1,230	561	1,252	559	1,284	576
Oregon.....	1,058	418	1,017	404	907	406
California and Hawaii.....	2,739	1,277	2,919	1,370	2,802	1,248

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies. ^rRevised.

¹The following is the breakdown of geographic areas used by the Census Bureau. Northeast Region: New England Division: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; Middle Atlantic Division: New York, New Jersey, and Pennsylvania. North Central Region: East North Central Division: Ohio, Indiana, Illinois, Michigan, and Wisconsin; West North Central Division: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. South Region: South Atlantic Division: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; East South Central Division: Kentucky, Tennessee, Alabama, and Mississippi; West South Central Division: Arkansas, Louisiana, Oklahoma, and Texas. West Region: Mountain Division: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Nevada, and Utah; Pacific Division: Washington, Oregon, California, Alaska, and Hawaii.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	May 1981	April 1981	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR (HARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	370	280	1,718
Peru.....	13	16	58
Chile.....	7	9	78
Morocco.....	119	154	485
Egypt.....	48	-	224
Israel.....	30	4	71
Sri Lanka.....	-	-	40
Philippines.....	60	50	193
Other.....	93	47	569
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	1,724	2,932	9,773
Mexico.....	6	4	61
Jamaica.....	70	30	161
Egypt.....	606	1,815	5,959
Saudi Arabia.....	496	214	1,532
Other.....	546	869	2,060
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	76,032	127,652	586,763
Mexico.....	1,820	4,580	22,216
Venezuela.....	3,406	924	11,887
Colombia.....	808	1,203	5,073
Peru.....	1,894	2,064	14,252
Brazil.....	7,722	8,392	45,234
Chile.....	1,796	2,849	11,085
Portugal.....	-	2,229	9,063
U.S.S.R.....	-	10,283	60,827
Morocco.....	-	-	-
Egypt.....	6,465	9,116	37,376
Bangladesh.....	-	-	-
China (Mainland).....	8,618	17,707	94,845
Korean Republic.....	3,068	10,750	34,612
Indonesia.....	2,963	919	10,688
Philippines.....	1,968	4,898	10,824
Nigeria.....	2,714	4,226	16,787
Other.....	32,790	47,512	201,994

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
MAY 1981						
Wheat flour.....	23,421	(NA)	2,094	27,392	8.9	(NA)
APRIL 1981						
Wheat flour.....	23,967	(NA)	3,212	38,075	13.4	(NA)

Comparison of SIC codes (domestic output), Schedule B export codes, and TSUSA import codes is as follows:

SIC (domestic output)

20411

Export

131.4010-131.4040

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

DESCRIPTION OF SURVEY

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Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 establishments, representing 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1977 Census of Manufactures. The survey mail panel consists of mills with a daily capacity of over 400 sacks of flour. Data for approximately 200 small establishments are estimated based upon their 1977 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

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Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B.

The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. The seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour than can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation—There are different methods of valuation for the three types of data:

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501 effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

"Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
M20C	Monthly	<i>Confectionery, Including Chocolate Products</i>
<i>Foreign Trade Reports</i>		
FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	John Streeter	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Customer Services (DUSD)	(301) 449-1600
To order Census Bureau microfiche	Maria Brown	(301) 763-5511

From the Bureau of the Census...

a report on how the 1977
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The **History of the 1977 Economic Censuses** chronicles the planning, data collecting, data processing, and publication of 1977 census results. Based on memorandums, interviews, specifications, internal progress reports, and other planning documents, this report is a history of the latest quinquennial censuses of the Nation's economic activity prepared by the Census Bureau for general distribution.

The history covers the censuses of retail trade, wholesale trade, service industries, construction industries, manufactures, mineral industries, transportation, and women-owned businesses; the survey of minority-owned business enterprises and the special survey of women-owned businesses; and the enterprise statistics program. The introduction contains a synopsis of census operations. The publication is illustrated with maps, tables, and charts. Appendixes

present specialized reference materials, including a history of previous economic censuses; a roster of key Census personnel; descriptions of geographic areas covered and codes used; a list of questionnaire forms and facsimiles of selected ones; lists of published census reports; provisions of title

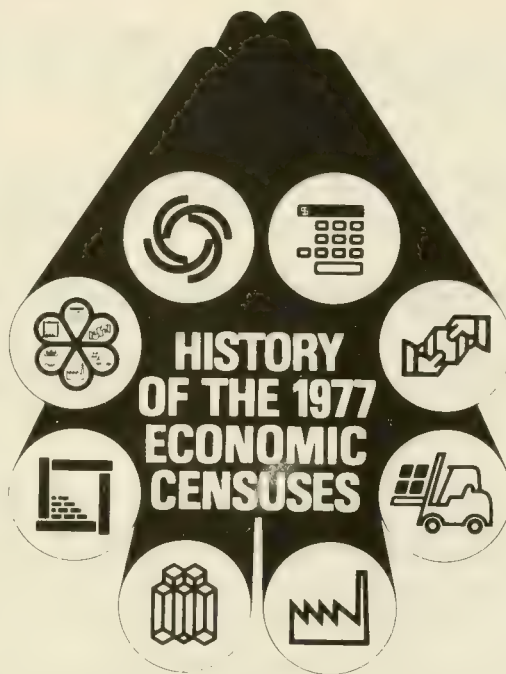
13, United States Code, relating to the 1977 economic censuses; principal advisory committees and conferences on the 1977 censuses; and a glossary of economic terms.

The 1977 history is of special value to users of census data and to students of survey techniques.

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Other Census Histories

This report on the 1977 economic censuses is part of a continuing program of histories prepared for each major census. Those for the 1978 Census of Agriculture and the 1980 Census of Population and Housing are currently in preparation. The various phases of the 1982 economic and agricultural censuses are being recorded and histories of them will be issued after the census period ends in 1985.



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for 200 industries with projections for 1985

This year's edition of this popular and inexpensive volume has just been published by the Commerce Department's Bureau of Industrial Economics.

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analysis, and input-output charts for major industries. The 1981 edition has been enlarged to include sections on energy and mining.

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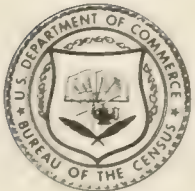
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Flour Milling Products



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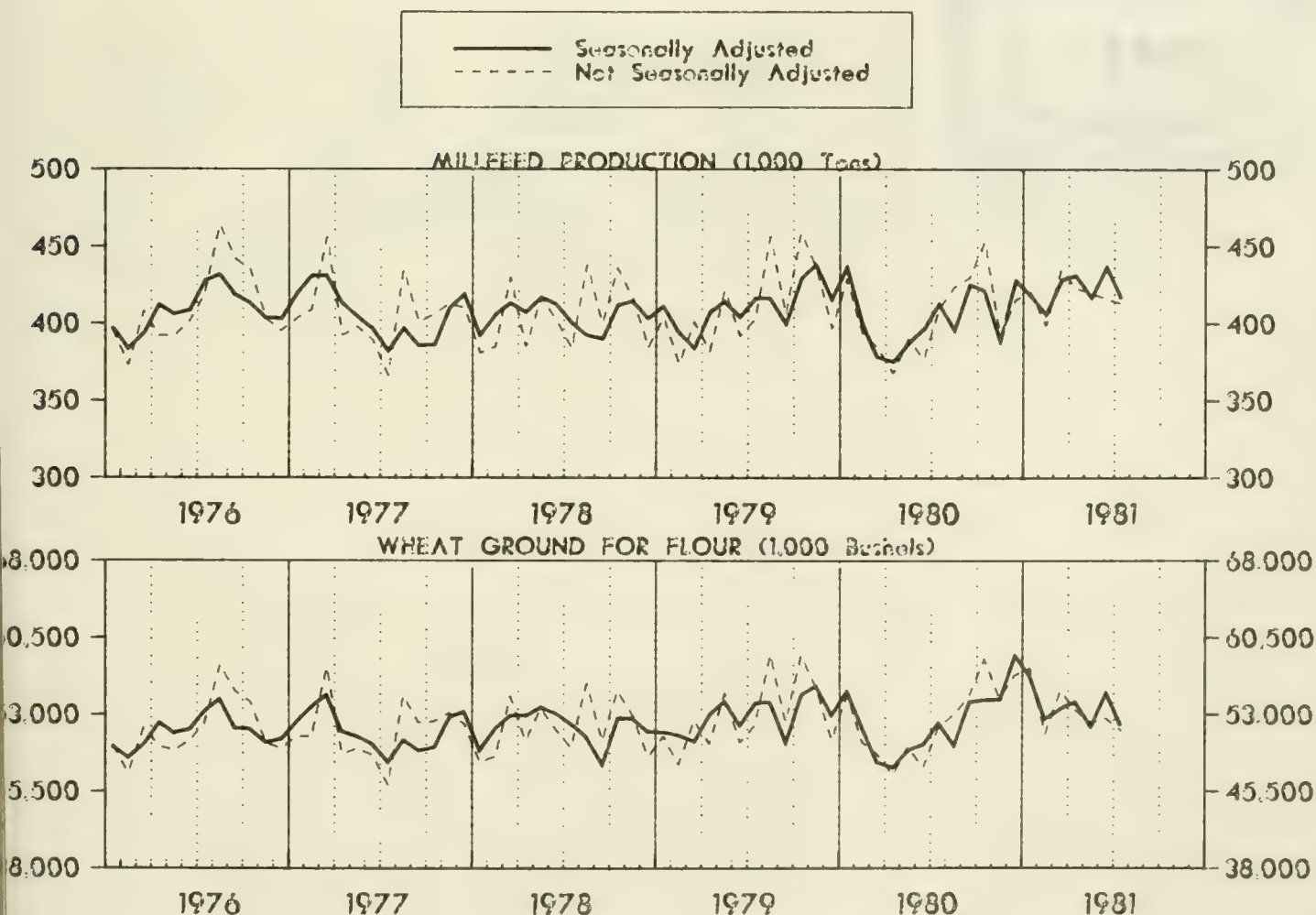
JULY 1981

M20A(81)-7
Issued September 1981

The statistics in this publication are based on a survey of flour mills and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of the survey appears on page 7.

WHEAT FLOUR MILLING: 1976 TO 1981



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

For sale by Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price, 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1981			
July.....	1,072	417	51,982
June.....	1,114	437	55,271
May.....	1,161	418	51,976
April.....	1,127	432	54,285
March.....	1,122	429	53,644
February.....	1,122	407	52,655
January.....	1,278	419	56,846
1980			
December.....	1,189	429	58,530
November.....	1,085	391	54,537
October.....	1,142	422	54,498
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,120	423	53,268
November.....	1,148	428	54,545
October.....	1,123	426	54,856
September.....	1,121	410	52,674
August.....	1,150	418	54,184
July.....	1,162	418	53,933
June.....	1,114	407	52,819

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production (1,000 cwt.)		Mill feed production (tons)	Wheat ground for flour (1,000 bushels)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)	Wheat flour mill stocks ² (1,000 cwt.)
	Average per working day ¹	Calendar month total						
1981								
July (23 days).....	1,018	23,414	412,745	51,417	1,061	96.0	75.9	(NA)
June (22 days).....	1,069	23,521	415,510	52,643	1,061	100.8	74.5	3,895
May (20 days).....	1,171	23,421	420,038	52,184	1,056	110.9	74.8	(NA)
April (22 days).....	1,089	23,967	423,747	53,402	1,056	103.1	74.8	(NA)
March (22 days).....	1,135	24,959	434,910	55,310	1,056	107.5	75.2	3,897
February (20 days).....	1,139	22,787	399,271	51,084	1,056	107.8	74.3	(NA)
January (21 days).....	1,231	25,860	420,559	57,513	1,056	116.6	74.9	(NA)
1980								
December (22 days).....	1,147	25,232	415,419	56,820	1,056	108.6	74.0	3,842
November (19 days).....	1,197	24,420	392,305	54,582	1,056	113.4	74.6	(NA)
October (23 days).....	1,143	26,285	453,219	58,392	1,056	108.2	75.0	(NA)
September (21 days).....	1,182	24,813	429,851	54,762	1,056	111.9	75.5	3,716
August (21 days).....	1,144	24,025	423,743	52,980	1,056	108.3	75.6	(NA)
July (22 days).....	1,052	23,137	409,644	51,760	1,056	99.6	74.5	(NA)
June (21 days).....	1,017	21,356	377,292	47,786	1,056	96.5	74.5	4,268
May (21 days).....	1,086	22,814	390,185	49,836	1,059	102.5	76.3	(NA)
April (22 days).....	965	21,231	367,709	47,170	1,059	91.1	75.0	(NA)
March (21 days).....	1,055	22,165	384,383	49,104	1,059	99.6	75.2	(NA)
February (21 days).....	1,077	22,624	394,095	50,352	1,059	101.7	74.9	3,323
January (22 days).....	1,116	24,553	429,495	54,955	1,059	105.4	74.5	(NA)
1979								
December (20 days).....	1,137	22,744	396,985	50,643	1,059	107.3	74.9	3,975
November (21 days).....	1,180	24,783	435,838	55,710	1,050	118.0	74.1	(NA)
October (23 days).....	1,137	26,143	458,795	58,904	1,050	108.2	74.0	(NA)
September (19 days).....	1,226	23,285	407,341	52,375	1,050	116.7	74.1	3,813
August (23 days).....	1,145	26,340	456,627	59,006	1,050	109.1	74.4	(NA)
July (21 days).....	1,120	23,513	403,133	52,111	1,050	106.6	75.2	(NA)
June (22 days).....	1,025	22,541	391,196	50,250	1,050	102.2	74.8	3,895

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	July 1981	June 1981	July 1980
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,198	2,116	2,174
20411 55	Straight semolina durum flour.....	M cwt.....	964	917	947
	Blended semolina durum flour.....	M cwt.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	306	293	306
20416 11	Rye flour production.....	M cwt.....	132	134	140
20416 18	Rye millfeed production.....	Tons.....	1,685	1,431	1,367
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	27	(NA)
	24 hour capacity.....	M cwt.....	9	9	11

Note: These data exclude flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE

Geographic area ¹	July 1981		June 1981		July 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)
United States.....	51,417	23,414	52,643	23,521	51,760	23,137
Middle Atlantic.....	6,273	3,387	7,216	3,202	6,508	2,933
New York.....	4,763	2,705	5,743	2,544	5,162	2,326
North Central.....	26,161	11,575	26,708	11,975	26,795	11,999
Ohio.....	2,890	1,279	2,856	1,257	2,666	1,160
Indiana.....	1,374	556	1,512	666	1,462	634
Illinois.....	3,265	1,426	3,267	1,438	2,964	1,320
Michigan.....	822	363	790	346	735	313
Minnesota.....	5,449	2,484	5,358	2,421	5,711	2,587
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,703	1,222	2,627	1,194	3,533	1,604
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	6,335	2,834	6,437	2,911	6,475	2,928
South Atlantic.....	4,087	1,779	4,062	1,771	3,646	1,573
East South Central.....	2,692	1,177	2,657	1,153	2,712	1,186
Tennessee.....	2,124	944	2,076	906	2,034	893
West South Central.....	3,930	1,768	4,073	1,836	3,801	1,718
Oklahoma.....	1,497	685	1,622	744	1,630	759
Texas.....	1,882	841	1,883	839	1,597	706
Mountain.....	2,918	1,328	2,760	1,257	2,789	1,292
Montana.....	699	313	577	259	612	284
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,346	2,400	5,167	2,327	5,509	2,436
Washington.....	1,519	675	1,229	561	1,493	664
Oregon.....	1,173	475	1,196	487	955	437
California and Hawaii.....	2,654	1,250	2,742	1,279	3,061	1,335

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

¹The following is the breakdown of geographic areas used by the Census Bureau. Northeast Region: New England Division-- Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; Middle Atlantic Division-- New York, New Jersey, and Pennsylvania. North Central Region: East North Central Division-- Ohio, Indiana, Illinois, Michigan, and Wisconsin; West North Central Division-- Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. South Region: South Atlantic Division-- Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; East South Central Division-- Kentucky, Tennessee, Alabama, and Mississippi; West South Central Division-- Arkansas, Louisiana, Oklahoma, and Texas. West Region: Mountain Division-- Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Nevada, and Utah; Pacific Division-- Washington, Oregon, California, Alaska, and Hawaii.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	June 1981	May 1981	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	177	370	1,895
Peru.....	-	13	58
Chile.....	9	7	87
Morocco.....	21	119	506
Egypt.....	11	48	235
Israel.....	-	30	71
Sri Lanka.....	-	-	40
Philippines.....	22	60	215
Other.....	114	93	683
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	2,350	1,724	12,124
Mexico.....	40	6	101
Jamaica.....	53	70	214
Egypt.....	1,924	606	7,884
Saudi Arabia.....	196	496	1,730
Other.....	137	546	2,195
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	124,518	76,032	711,280
Mexico.....	2,703	1,820	24,919
Venezuela.....	1,980	3,406	13,867
Colombia.....	1,482	808	6,556
Peru.....	2,904	1,894	17,156
Brazil.....	12,570	7,722	57,804
Chile.....	5,305	1,796	16,390
Portugal.....	1,762	-	10,826
U.S.S.R.....	-	-	60,827
Morocco.....	7,891	-	7,891
Egypt.....	6,701	6,465	44,077
Bangladesh.....	-	-	-
China (Mainland).....	17,777	8,618	112,622
Korean Republic.....	4,661	3,068	39,273
Indonesia.....	1,777	2,963	12,464
Philippines.....	3,005	1,968	13,829
Nigeria.....	4,440	2,714	22,123
Other.....	49,560	32,790	250,656

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
JUNE 1981						
Wheat flour.....	23,521	(NA)	2,527	30,593	10.7	(NA)
MAY 1981						
Wheat flour.....	23,421	(NA)	3,212	27,392	13.7	(NA)

Comparison of SIC codes (domestic output), Schedule B export codes, and TSUSA import codes is as follows:

SIC (domestic output)

20411

Export

131.4010-131.4040

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

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EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour than can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation—There are different methods of valuation for the three types of data:

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501 effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

"Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
M20C	Monthly	<i>Confectionery, Including Chocolate Products</i>
<i>Foreign Trade Reports</i>		
FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	John Streeter	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Customer Services (DUSD)	(301) 449-1600
To order Census Bureau microfiche	Maria Brown	(301) 763-5511

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The history covers the censuses of retail trade, wholesale trade, service industries, construction industries, manufactures, mineral industries, transportation, and women-owned businesses; the survey of minority-owned business enterprises and the special survey of women-owned businesses; and the enterprise statistics program. The introduction contains a synopsis of census operations. The publication is illustrated with maps, tables, and charts. Appendixes

present specialized reference materials, including a history of previous economic censuses; a roster of key Census personnel; descriptions of geographic areas covered and codes used; a list of questionnaire forms and facsimiles of selected ones; lists of published census reports; provisions of title

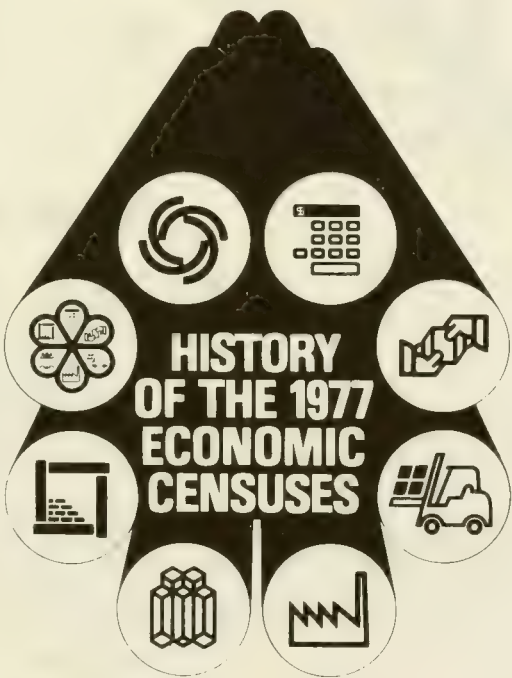
13, United States Code, relating to the 1977 economic censuses; principal advisory committees and conferences on the 1977 censuses; and a glossary of economic terms.

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This report on the 1977 economic censuses is part of a continuing program of histories prepared for each major census. Those for the 1978 Census of Agriculture and the 1980 Census of Population and Housing are currently in preparation. The various phases of the 1982 economic and agricultural censuses are being recorded and histories of them will be issued after the census period ends in 1985.



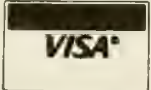
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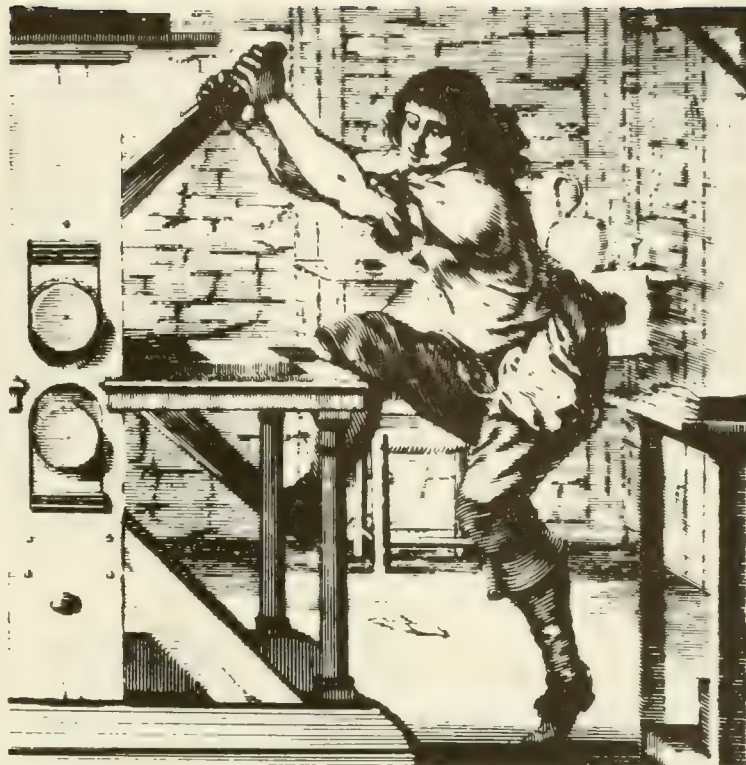
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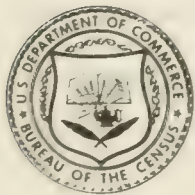
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Flour Milling Products



U.S. Department of Commerce
BUREAU OF THE CENSUS

AUGUST 1981

M20A(81)-8
Issued October 1981

The statistics in this publication are based on a survey of flour mills and represent total U.S. production of flour milling products. Estimates are included for companies whose

reports were not received in time for tabulation. A more complete description of the survey appears on page 7.

WHEAT FLOUR MILLING: 1976 TO 1981

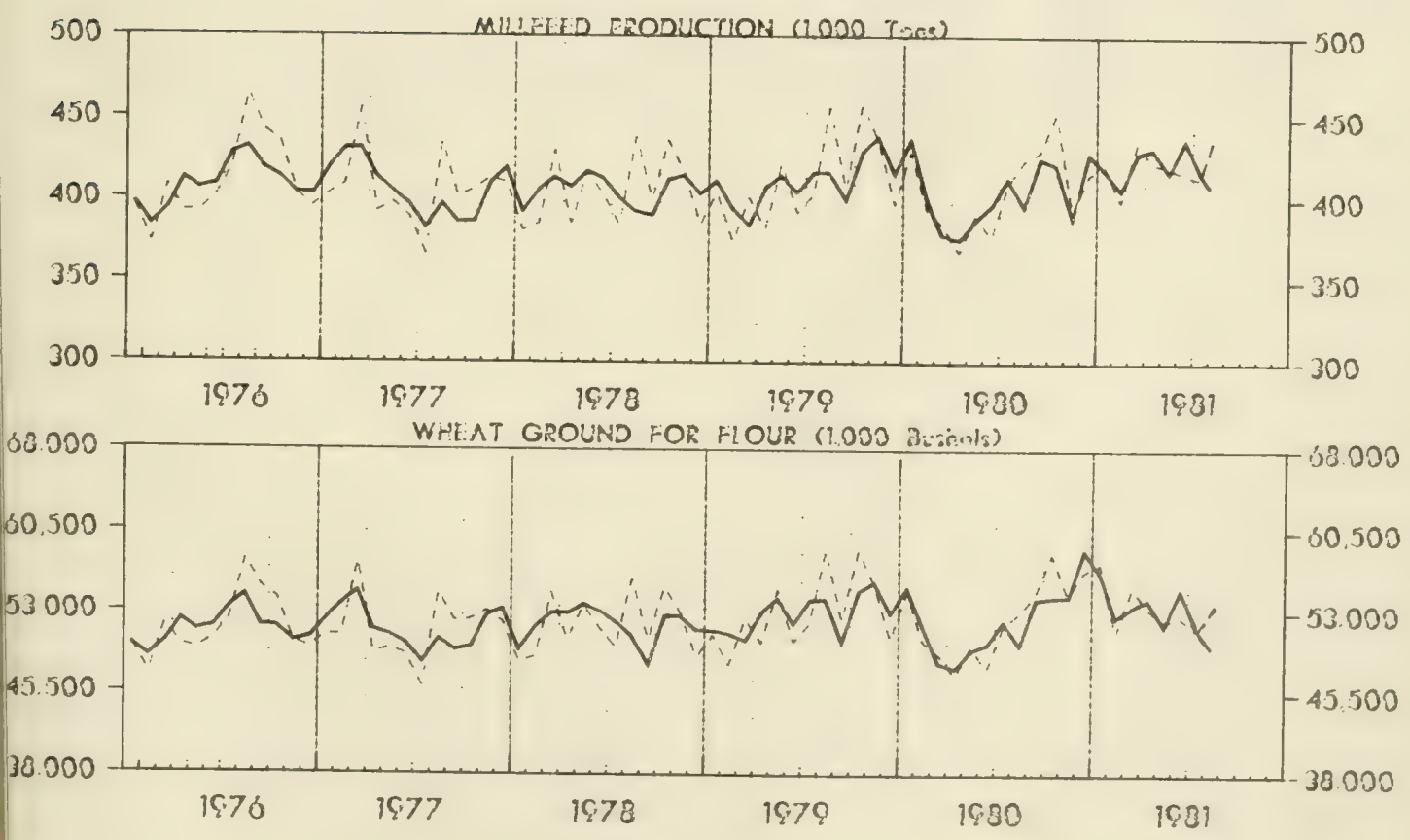
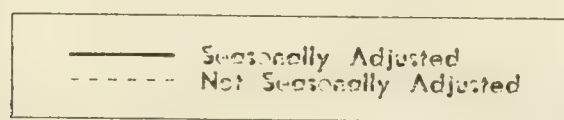


Table 1A. SUMMARY OF WHEAT FLOUR MILLING, SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1981			
August.....	1,080	405	51,030
July.....	1,069	414	51,757
June.....	1,114	437	55,271
May.....	1,161	418	51,976
April.....	1,127	432	54,285
March.....	1,122	429	53,644
February.....	1,122	407	52,655
January.....	1,278	419	56,846
1980			
December.....	1,189	429	58,530
November.....	1,085	391	54,537
October.....	1,142	422	54,498
September.....	1,152	426	54,327
August.....	1,090	397	50,154
July.....	1,108	414	52,329
June.....	1,060	397	50,171
May.....	1,076	388	49,637
April.....	999	376	47,950
March.....	1,043	379	48,451
February.....	1,061	402	51,901
January.....	1,163	438	55,454
1979			
December.....	1,120	423	53,268
November.....	1,148	428	54,545
October.....	1,123	426	54,856
September.....	1,121	410	52,674
August.....	1,150	418	54,184
July.....	1,162	418	53,933

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production (1,000 cwt.)		Mill feed production (tons)	Wheat ground for flour (1,000 bushels)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)	Wheat flour mill stocks ² (1,000 cwt.)
	Average per working day ¹	Calendar month total						
1981								
August (21 days).....	1,134	23,810	432,299	53,905	1,061	106.9	73.6	(NA)
July (23 days).....	1,015	23,342	410,361	51,194	1,061	95.7	76.0	(NA)
June (22 days).....	1,069	23,521	415,510	52,643	1,061	100.8	74.5	3,895
May (20 days).....	1,171	23,421	420,038	52,184	1,056	110.9	74.8	(NA)
April (22 days).....	1,089	23,967	423,747	53,402	1,056	103.1	74.8	(NA)
March (22 days).....	1,135	24,959	434,910	55,310	1,056	107.5	75.2	3,897
February (20 days).....	1,139	22,787	399,271	51,084	1,056	107.8	74.3	(NA)
January (21 days).....	1,231	25,860	420,559	57,513	1,056	116.6	74.9	(NA)
1980								
December (22 days).....	1,147	25,232	415,419	56,820	1,056	108.6	74.0	3,842
November (19 days).....	1,197	24,420	392,305	54,582	1,056	113.4	74.6	(NA)
October (23 days).....	1,143	26,285	453,219	58,392	1,056	108.2	75.0	(NA)
September (21 days).....	1,182	24,813	429,851	54,762	1,056	111.9	75.5	3,716
August (21 days).....	1,144	24,025	423,743	52,980	1,056	108.3	75.6	(NA)
July (22 days).....	1,052	23,137	409,644	51,760	1,056	99.6	74.5	(NA)
June (21 days).....	1,017	21,356	377,292	47,786	1,056	96.5	74.5	4,268
May (21 days).....	1,086	22,814	390,185	49,836	1,059	102.5	76.3	(NA)
April (22 days).....	965	21,231	367,709	47,170	1,059	91.1	75.0	(NA)
March (21 days).....	1,055	22,165	384,383	49,104	1,059	99.6	75.2	3,323
February (21 days).....	1,077	22,624	394,095	50,352	1,059	101.7	74.9	(NA)
January (22 days).....	1,116	24,553	429,495	54,955	1,059	105.4	74.5	(NA)
1979								
December (20 days).....	1,137	22,744	396,985	50,643	1,059	107.3	74.9	3,975
November (21 days).....	1,180	24,783	435,838	55,710	1,050	118.0	74.1	(NA)
October (23 days).....	1,137	26,143	458,795	58,904	1,050	108.2	74.0	(NA)
September (19 days).....	1,226	23,285	407,341	52,375	1,050	116.7	74.1	3,813
August (23 days).....	1,145	26,340	456,627	59,006	1,050	109.1	74.4	(NA)
July (21 days).....	1,120	23,513	403,133	52,111	1,050	106.6	75.2	(NA)

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	August 1981	July 1981	August 1980
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,970	2,188	3,187
20411 55	Straight semolina durum flour.....	M cwt.....	1,290	957	1,384
	Blended semolina durum flour.....	M cwt.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	260	306	273
20416 11	Rye flour production.....	M cwt.....	122	132	125
20416 18	Rye millfeed production.....	Tons.....	1,213	1,744	1,310
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity.....	M cwt.....	9	11	11

Note: These data exclude flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE

Geographic area ¹	August 1981		July 1981		August 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)
United States.....	53,905	23,810	51,194	23,342	52,980	24,025
Middle Atlantic.....	6,998	3,119	6,270	3,392	6,856	3,111
New York.....	5,253	2,330	4,760	2,703	5,443	2,453
North Central.....	28,475	12,243	26,231	11,595	27,917	12,556
Ohio.....	3,016	1,334	2,890	1,279	2,841	1,252
Indiana.....	1,486	561	1,472	556	1,340	587
Illinois.....	3,725	1,635	3,420	1,517	3,199	1,431
Michigan.....	894	387	846	370	804	323
Minnesota.....	6,137	2,777	5,400	2,421	6,182	2,827
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,716	1,152	2,703	1,222	3,403	1,570
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,859	2,622	6,267	2,810	6,393	2,917
South Atlantic.....	4,119	1,796	4,087	1,779	3,818	1,685
East South Central.....	2,813	1,285	2,648	1,152	2,738	1,208
Tennessee.....	2,229	1,036	2,080	919	2,131	949
West South Central.....	3,594	1,601	3,944	1,775	3,746	1,617
Oklahoma.....	1,318	607	1,498	687	1,517	705
Texas.....	1,707	747	1,895	847	1,674	665
Mountain.....	3,002	1,365	2,918	1,328	2,925	1,368
Montana.....	727	330	699	313	679	317
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,904	2,401	5,096	2,321	4,980	2,480
Washington.....	1,497	665	1,519	675	1,421	632
Oregon.....	986	449	992	452	988	452
California and Hawaii.....	2,764	1,267	2,585	1,194	2,571	1,361

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies. [†]Revised.

¹The following is the breakdown of geographic areas used by the Census Bureau. Northeast Region: New England Division-- Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; Middle Atlantic Division-- New York, New Jersey, and Pennsylvania. North Central Region: East North Central Division-- Ohio, Indiana, Illinois, Michigan, and Wisconsin; West North Central Division-- Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. South Region: South Atlantic Division-- Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; East South Central Division-- Kentucky, Tennessee, Alabama, and Mississippi; West South Central Division-- Arkansas, Louisiana, Oklahoma, and Texas. West Region: Mountain Division-- Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Nevada, and Utah; Pacific Division-- Washington, Oregon, California, Alaska, and Hawaii.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	July 1981	June 1981	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	213	177	2,108
Peru.....	-	-	58
Chile.....	15	9	102
Morocco.....	68	21	574
Egypt.....	80	11	315
Israel.....	16	-	86
Sri Lanka.....	-	-	40
Philippines.....	-	22	215
Other.....	34	114	758
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	987	2,350	13,111
Mexico.....	37	40	138
Jamaica.....	81	53	295
Egypt.....	511	1,924	8,395
Saudi Arabia.....	74	196	1,804
Other.....	284	137	2,479
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	138,146	124,518	849,426
Mexico.....	3,403	2,703	28,322
Venezuela.....	3,779	1,980	17,646
Colombia.....	2,179	1,482	8,734
Peru.....	1,980	2,904	19,136
Brazil.....	7,336	12,570	65,140
Chile.....	4,240	5,305	20,631
Portugal.....	4,818	1,762	15,643
U.S.S.R.....	-	-	60,827
Morocco.....	5,339	7,891	13,230
Egypt.....	6,467	6,701	50,544
Bangladesh.....	-	-	-
China (Mainland).....	-	-	-
Korean Republic.....	31,841	17,777	144,463
Indonesia.....	5,567	4,661	44,840
Philippines.....	2,906	1,777	15,371
Nigeria.....	3,008	3,005	16,837
Other.....	2,572	4,440	23,799
	52,711	49,560	304,263

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹		Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value	Quantity	Value
JULY 1981						
Wheat flour.....	23,342	(NA)	1,200	13,252	5.1	(NA)
JUNE 1981						
Wheat flour.....	23,521	(NA)	2,527	30,593	10.7	(NA)

Comparison of SIC code (domestic output) with Schedule B export codes is as follows:

SIC (domestic output)Export

20411

131.4010-131.4040

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 establishments, representing 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1977 Census of Manufactures. The survey mail panel consists of mills with a daily capacity of over 400 sacks of flour. Data for approximately 200 small establishments are estimated based upon their 1977 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for establishments in the mail panel for which reports were not received in time for tabulation as well as for the small establishments excluded from the mail panel. Missing figures for companies in the mail panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for the small establishments excluded from the monthly mail panel. Individual items with imputation rates greater than 12 percent are footnoted.

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EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour than can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (Quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation—There are different methods of valuation for the three types of data:

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$501 effective March 1979 and for shipments valued under \$251 prior to March 1979. This is believed to have only negligible effect on the statistics for most commodities.

Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

"Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. The annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
M20C	Monthly	<i>Confectionery, Including Chocolate Products</i>
<i>Foreign Trade Reports</i>		
FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

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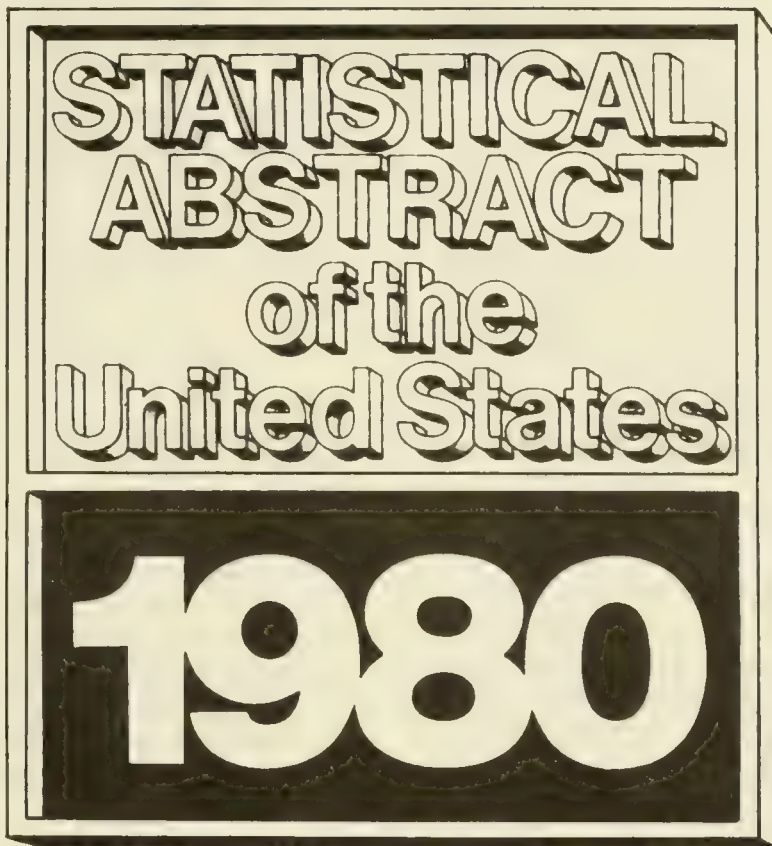
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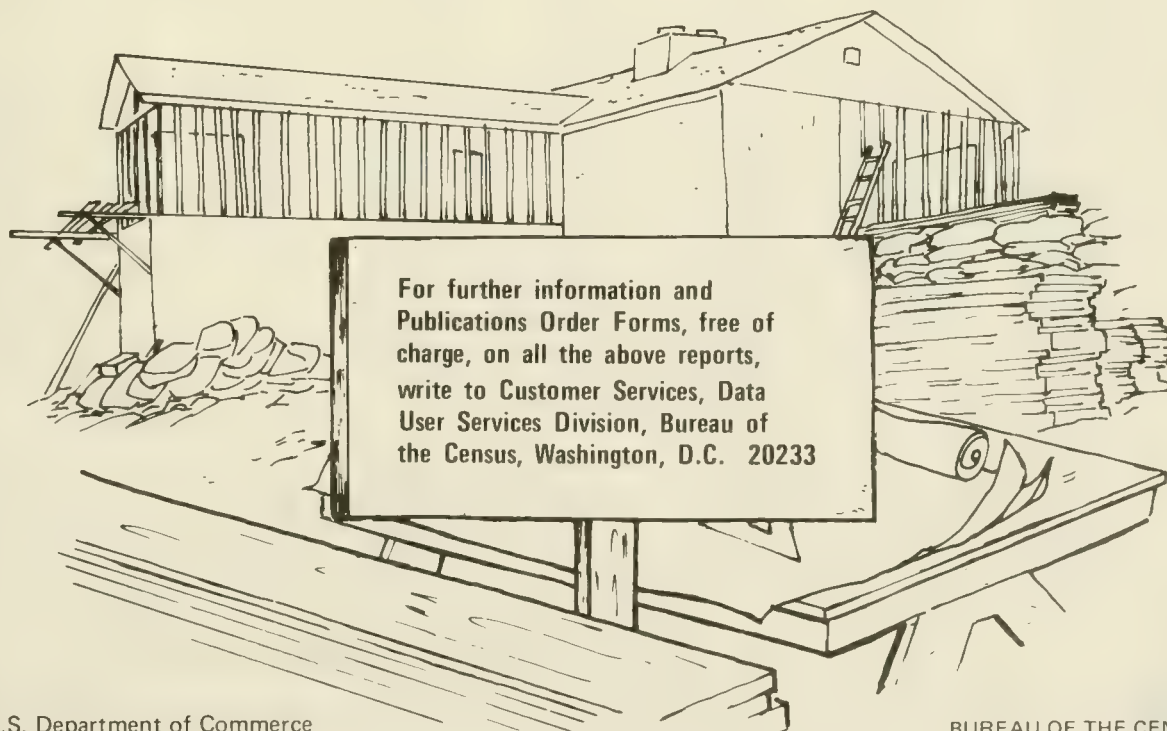
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3. 158:

CURRENT INDUSTRIAL REPORTS

Flour Milling Products

SEPTEMBER 1981

M20A(81)-9

Issued November 1981

U.S. Department of Commerce
BUREAU OF THE CENSUS

The statistics in this publication are based on a survey of flour mills and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A descrip-

tion of the survey methodology and related information may be found in the annual summary report in this series for 1980, M20A(80)-13, issued April 1981.

Table 1. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production, calendar month total (1,000 cwt.)	Mill feed production (tons)	Wheat ground for flour (1,000 bushels)	Daily 24-hour capacity in wheat flour ¹ (1,000 cwt.)	Flour extraction rate ² (percent)	Wheat flour mill stocks ¹ (1,000 cwt.)
1981						
September.....	24,842	448,679	56,014	1,058	73.9	4,222
August.....	23,665	431,165	53,323	1,061	74.0	(NA)
July.....	23,342	410,361	51,194	1,061	76.0	(NA)
June.....	23,521	415,510	52,643	1,061	74.5	3,895
May.....	23,421	420,038	52,184	1,056	74.8	(NA)
April.....	23,967	423,747	53,402	1,056	74.8	(NA)
March.....	24,959	434,910	55,310	1,056	75.2	3,897
February.....	22,787	399,271	51,084	1,056	74.3	(NA)
January.....	25,860	420,559	57,513	1,056	74.9	(NA)
1980						
December.....	25,232	415,419	56,820	1,056	74.0	3,842
November.....	24,420	392,305	54,482	1,056	74.6	(NA)
October.....	26,285	453,219	58,392	1,056	75.0	(NA)
September.....	24,813	429,851	54,762	1,056	75.5	3,716
August.....	24,025	423,743	52,980	1,056	75.6	(NA)
July.....	23,137	409,644	51,760	1,056	74.5	(NA)
June.....	21,356	377,292	47,786	1,056	74.5	4,268
May.....	22,814	390,185	49,836	1,059	76.3	(NA)
April.....	21,231	367,709	47,170	1,059	75.0	(NA)
March.....	22,165	384,383	49,104	1,059	75.2	3,323
February.....	22,624	394,095	50,352	1,059	74.9	(NA)
January.....	24,553	429,495	54,955	1,059	74.5	(NA)
1979						
December.....	22,744	396,985	50,643	1,059	74.9	3,975
November.....	24,783	435,838	55,710	1,050	74.1	(NA)
October.....	26,143	458,795	58,904	1,050	74.0	(NA)
September.....	23,285	407,341	52,375	1,050	74.1	3,813
August.....	26,340	456,627	59,006	1,050	74.4	(NA)

(NA) Not available.

¹Collected quarterly.²Wheat flour production as compared with amount of wheat ground.

Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

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Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	September 1981	August 1981	September 1980
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.,....	2,963	2,902	2,804
20411 53	Straight semolina durum flour.....	M cwt.....	1,276	1,253	1,233
20411 55	Blended semolina durum flour.....	M cwt.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.,....	311	260	309
20416 11	Rye flour production.....	M cwt.....	141	122	143
20416 18	Rye millfeed production.....	Tons.....	1,495	1,213	1,431
20416 11	Rye flour stocks ¹	M cwt.....	70	(NA)	11
	24 hour capacity.....	M cwt.....	9	9	10

Note: These data exclude flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE

Geographic area ¹	September 1981		August 1981		September 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)
United States.....	56,014	24,842	53,323	23,665	54,762	24,813
Middle Atlantic.....	7,412	3,295	6,998	3,119	7,055	3,163
New York.....	5,548	2,473	5,222	2,330	5,521	2,476
North Central.....	28,869	12,756	27,486	12,162	28,923	12,977
Ohio.....	3,236	1,417	3,022	1,335	3,321	1,476
Indiana.....	1,638	712	^r 1,356	585	1,534	670
Illinois.....	3,706	1,621	^r 3,450	^r 1,514	3,453	1,530
Michigan.....	1,039	449	905	390	831	359
Minnesota.....	6,153	2,766	6,109	2,762	6,399	2,917
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,003	1,346	2,714	1,214	3,483	1,589
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,612	2,480	5,548	2,466	6,225	2,805
South Atlantic.....	4,408	1,915	4,119	1,796	3,587	1,672
East South Central.....	3,125	1,340	2,813	1,223	2,824	1,242
Tennessee.....	2,540	1,096	2,229	974	2,170	960
West South Central.....	3,717	1,660	3,578	1,594	3,965	1,791
Oklahoma.....	(D)	(D)	1,318	607	1,638	766
Texas.....	1,835	787	1,688	738	1,725	759
Mountain.....	3,177	1,456	3,002	1,365	2,951	1,400
Montana.....	785	362	^r 727	330	713	329
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,306	2,420	5,327	2,406	5,457	2,568
Washington.....	1,357	607	1,497	665	1,366	611
Oregon.....	927	419	^r 912	^r 398	1,017	462
California and Hawaii.....	3,022	1,394	2,918	^r 1,343	3,074	1,495

Note: ¹Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies. ^rRevised.

¹The following is the breakdown of geographic areas used by the Census Bureau. Northeast Region: New England Division-- Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; Middle Atlantic Division-- New York, New Jersey, and Pennsylvania. North Central Region: East North Central Division-- Ohio, Indiana, Illinois, Michigan, and Wisconsin; West North Central Division-- Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. South Region: South Atlantic Division-- Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; East South Central Division-- Kentucky, Tennessee, Alabama, and Mississippi; West South Central Division-- Arkansas, Louisiana, Oklahoma, and Texas. West Region: Mountain Division-- Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Nevada, and Utah; Pacific Division-- Washington, Oregon, California, Alaska, and Hawaii.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	August 1981	July 1981	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	90	213	2,197
Peru.....	24	-	82
Chile.....	12	15	114
Morocco.....	3	68	577
Egypt.....	-	80	315
Israel.....	4	16	90
Sri Lanka.....	-	-	40
Philippines.....	11	-	226
Other.....	36	34	753
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	1,420	987	14,531
Mexico.....	20	37	158
Jamaica.....	85	81	381
Egypt.....	-	511	8,395
Saudi Arabia.....	178	74	1,982
Other.....	1,137	284	3,615
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	145,428	138,146	994,855
Mexico.....	977	3,403	29,299
Venezuela.....	3,518	3,779	21,164
Colombia.....	2,730	2,179	11,465
Peru.....	2,825	1,980	21,961
Brazil.....	12,077	7,336	77,217
Chile.....	4,806	4,240	25,437
Portugal.....	-	4,818	15,643
U.S.S.R.....	3,449	-	64,276
Morocco.....	1,809	5,339	15,039
Egypt.....	4,508	6,467	55,052
Bangladesh.....	6,744	-	6,744
China (Mainland).....	25,690	31,841	170,153
Korean Republic.....	3,484	5,567	48,324
Indonesia.....	2,989	2,906	18,360
Philippines.....	3,896	3,008	20,733
Nigeria.....	4,965	2,572	28,765
Other.....	60,961	52,711	365,223

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹			Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value at port	Estimated producers' value ²	Quantity	Value
AUGUST 1981							
Wheat flour.....	23,665	(NA)	1,510	17,945	15,802	6.4	(NA)
JULY 1981							
Wheat flour.....	23,342	(NA)	1,200	13,252	11,670	5.1	(NA)

Comparison of SIC codes (domestic output), Schedule B export codes, and TSUSA import codes is shown in the annual summary report in this series for 1980, M20A(80)-13, issued April 1981.

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

²These values were derived by use of adjustment factors to exclude freight, insurance, and other charges incurred in moving goods to the port of export. This adjustment is made to convert the values to an approximation of the producers' value of exported goods. Current adjustment factors (0.8806 for industry group 204) are based on data for 1977 which are published in MC77-SR-12, Origin of Exports of Manufactured Products, appendix B.

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Flour Milling Products

OCTOBER 1981

U.S. Department of Commerce
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Issued December 1981

The statistics in this publication are based on a survey of flour mills and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A descrip-

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Table 1. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production, calendar month total (1,000 cwt.)	Mill feed production (tons)	Wheat ground for flour (1,000 bushels)	Daily 24-hour capacity in wheat flour ¹ (1,000 cwt.)	Wheat flour mill stocks ¹ (1,000 cwt.)
1981					
October.....	24,753	440,721	55,627	1,061	(NA)
September.....	24,189	435,956	54,589	1,061	4,222
August.....	23,665	431,165	53,323	1,061	(NA)
July.....	23,342	410,361	51,194	1,061	(NA)
June.....	23,521	415,510	52,643	1,061	3,895
May.....	23,421	420,038	52,184	1,056	(NA)
April.....	23,967	423,747	53,402	1,056	(NA)
March.....	24,959	434,910	55,310	1,056	3,897
February.....	22,787	399,271	51,084	1,056	(NA)
January.....	25,860	420,559	57,513	1,056	(NA)
1980					
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October.....	26,285	453,219	58,392	1,056	(NA)
September.....	24,813	429,851	54,762	1,056	3,716
August.....	24,025	423,743	52,980	1,056	(NA)
July.....	23,137	409,644	51,760	1,056	(NA)
June.....	21,356	377,292	47,786	1,056	4,268
May.....	22,814	390,185	49,836	1,059	(NA)
April.....	21,231	367,709	47,170	1,059	(NA)
March.....	22,165	384,383	49,104	1,059	3,323
February.....	22,624	394,095	50,352	1,059	(NA)
January.....	24,553	429,495	54,955	1,059	(NA)
1979					
December.....	22,744	396,985	50,643	1,059	3,975
November.....	24,783	435,838	55,710	1,050	(NA)
October.....	26,143	458,795	58,904	1,050	(NA)
September.....	23,285	407,341	52,375	1,050	3,813

(NA) Not available.

¹Collected quarterly.

Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

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Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	October 1981	September 1981	October 1980
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,964	2,963	2,932
20411 55	Straight semolina durum flour.....	M cwt.....	1,300	1,276	1,265
	Blended semolina durum flour.....	M cwt.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	306	311	326
20416 11	Rye flour production.....	M cwt.....	139	141	148
20416 18	Rye millfeed production.....	Tons.....	1,385	1,495	1,591
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	70	(NA)
	24 hour capacity.....	M cwt.....	9	9	11

Note: These data exclude flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE

Geographic area ¹	October 1981		September 1981		October 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 bushels)
United States.....	55,627	24,753	54,589	24,189	58,392	26,285
Middle Atlantic.....	7,311	3,258	7,157	3,182	7,647	3,453
New York.....	5,649	2,521	5,548	2,473	6,006	2,705
North Central.....	28,694	12,737	28,081	12,389	30,913	13,865
Ohio.....	3,500	1,538	3,236	1,415	3,648	1,602
Indiana.....	1,862	815	1,735	755	1,694	741
Illinois.....	3,670	1,606	3,572	1,556	3,571	1,581
Michigan.....	1,138	503	1,059	458	1,008	440
Minnesota.....	6,022	2,737	6,087	2,738	7,113	3,224
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,302	1,477	3,003	1,346	4,022	1,844
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,690	2,524	5,502	2,432	6,322	2,856
South Atlantic.....	4,163	1,821	4,203	1,836	3,906	1,700
East South Central.....	3,184	1,374	3,110	1,340	2,668	1,196
Tennessee.....	2,568	1,118	2,525	1,096	2,137	949
West South Central.....	3,429	1,538	3,642	1,627	3,807	1,677
Oklahoma.....	(D)	(D)	(D)	(D)	1,640	765
Texas.....	1,646	730	1,719	754	1,587	651
Mountain.....	3,433	1,574	3,115	1,421	3,380	1,552
Montana.....	846	382	723	327	822	372
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,413	2,451	5,281	2,394	6,071	2,842
Washington.....	1,450	646	1,357	607	1,692	751
Oregon.....	1,001	444	1,036	465	1,092	496
California and Hawaii.....	2,962	1,361	2,888	1,322	3,287	1,595

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies. ^rRevised.

¹The following is the breakdown of geographic areas used by the Census Bureau. Northeast Region: New England Division-- Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; Middle Atlantic Division-- New York, New Jersey, and Pennsylvania. North Central Region: East North Central Division-- Ohio, Indiana, Illinois, Michigan, and Wisconsin; West North Central Division-- Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. South Region: South Atlantic Division-- Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; East South Central Division-- Kentucky, Tennessee, Alabama, and Mississippi; West South Central Division-- Arkansas, Louisiana, Oklahoma and Texas. West Region: Mountain Division-- Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Nevada, and Utah; Pacific Division-- Washington, Oregon, California, Alaska, and Hawaii.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	September 1981	August 1981	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	361	90	2,556
Peru.....	5	24	87
Chile.....	5	12	119
Morocco.....	216	3	793
Egypt.....	58	-	373
Israel.....	-	4	90
Sri Lanka.....	-	-	40
Philippines.....	41	11	267
Other.....	36	36	787
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1214040) (1,000 cwt.)			
Total.....	724	1,420	15,219
Mexico.....	4	20	162
Jamaica.....	56	85	436
Egypt.....	-	-	8,395
Saudi Arabia.....	489	178	2,471
Other.....	175	1,137	3,755
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	194,148	145,428	1,189,002
Mexico.....	3,389	977	32,688
Venezuela.....	3,335	3,518	24,499
Colombia.....	2,393	2,730	13,858
Peru.....	1,929	2,825	23,890
Brazil.....	13,932	12,077	91,149
Chile.....	3,187	4,806	28,623
Portugal.....	2,303	-	17,946
U.S.S.R.....	23,966	3,449	88,242
Morocco.....	5,413	1,809	20,451
Egypt.....	4,778	4,508	59,830
Bangladesh.....	995	6,744	7,739
China (Mainland).....	31,485	25,690	201,638
Korean Republic.....	6,552	3,484	54,876
Indonesia.....	2,933	2,989	21,294
Philippines.....	2,025	3,896	22,757
Nigeria.....	2,970	4,965	31,734
Other.....	82,563	60,961	447,788

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹			Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value at port	Estimated producers' value ²	Quantity	Value
SEPTEMBER 1981							
Wheat flour.....	24,753	(NA)	1,085	15,102	13,299	4.4	(NA)
AUGUST 1981							
Wheat flour.....	23,665	(NA)	1,510	17,945	15,802	6.4	(NA)

Comparison of SIC codes (domestic output), Schedule B export codes, and TSUSA import codes is shown in the annual summary report in this series for 1980, M20A(80)-13, issued April 1981.

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

²These values were derived by use of adjustment factors to exclude freight, insurance, and other charges incurred in moving goods to the port of export. This adjustment is made to convert the values to an approximation of the producers' value of exported goods. Current adjustment factors (.8806 for industry group 204) are based on data for 1977 which are published in MC77-SR-12, Origin of Exports of Manufactured Products, appendix B.

U.S. Department
of Commerce
BUREAU OF THE CENSUS
Washington, D.C. 20233

Official Business

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3. 158:

Flour Milling Products



M20A(81)-11

NOVEMBER 1981

U.S. Department of Commerce
BUREAU OF THE CENSUSM20A(81)-11
Issued January 1982

The statistics in this publication are based on a survey of flour mills and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A descrip-

tion of the survey methodology and related information may be found in the annual summary report in this series for 1980, M20A(80)-13, issued April 1981.

Table 1. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production, calendar month total (1,000 cwt.)	Mill feed production (tons)	Wheat ground for flour (1,000 bushels)	Daily 24-hour capacity in wheat flour ¹ (1,000 cwt.)	Wheat flour mill stocks ¹ (1,000 cwt.)
1981					
November.....	22,978	411,755	51,116	1,061	(NA)
October.....	24,712	440,419	55,552	1,061	(NA)
September.....	24,189	435,956	54,589	1,061	4,222
August.....	23,665	431,165	53,323	1,061	(NA)
July.....	23,342	410,361	51,194	1,061	(NA)
June.....	23,521	415,510	52,643	1,061	3,895
May.....	23,421	420,038	52,184	1,056	(NA)
April.....	23,967	423,747	53,402	1,056	(NA)
March.....	24,959	434,910	55,310	1,056	3,897
February.....	22,787	399,271	51,084	1,056	(NA)
January.....	25,860	420,559	57,513	1,056	(NA)
1980					
December.....	25,232	415,419	56,820	1,056	3,842
November.....	24,420	392,305	54,482	1,056	(NA)
October.....	26,285	453,219	58,392	1,056	(NA)
September.....	24,813	429,851	54,762	1,056	3,716
August.....	24,025	423,743	52,980	1,056	(NA)
July.....	23,137	409,644	51,760	1,056	(NA)
June.....	21,356	377,292	47,786	1,056	4,268
May.....	22,814	390,185	49,836	1,059	(NA)
April.....	21,231	367,709	47,170	1,059	(NA)
March.....	22,165	384,383	49,104	1,059	3,323
February.....	22,624	394,095	50,352	1,059	(NA)
January.....	24,553	429,495	54,955	1,059	(NA)
1979					
December.....	22,744	396,985	50,643	1,059	3,975
November.....	24,783	435,838	55,710	1,050	(NA)
October.....	26,143	458,795	58,904	1,050	(NA)

(NA) Not available.

¹Collected quarterly.

Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

For sale by Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price, 25 cents per copy, \$3.30 per year.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	November 1981	October 1981	November 1980
	Durum wheat (included in table 1 data):				
00111 73	Durum wheat ground.....	M bu.....	2,748	2,933	2,476
20411 53	Straight semolina durum flour.....	M cwt.....	1,213	1,286	1,064
20411 55	Blended semolina durum flour.....	M cwt.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.....	273	306	321
20416 11	Rye flour production.....	M cwt.....	127	139	155
20416 18	Rye millfeed production.....	Tons.....	1,275	1,385	1,583
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity.....	M cwt.....	9	9	11

Note: These data exclude flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE

Geographic area ¹	November 1981		October 1981		November 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 bushels)
United States.....	51,116	22,978	55,552	24,712	54,582	24,420
Middle Atlantic.....	6,951	3,133	7,311	3,258	7,123	3,182
New York.....	5,180	2,350	5,649	2,521	5,502	2,458
North Central.....	25,407	11,387	28,713	12,742	26,329	11,851
Ohio.....	3,029	1,342	3,500	1,538	2,919	1,296
Indiana.....	1,569	706	1,859	817	1,361	589
Illinois.....	3,153	1,392	3,670	1,606	3,104	1,384
Michigan.....	941	412	1,138	503	787	346
Minnesota.....	5,283	2,372	6,039	2,737	5,872	2,656
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,806	1,305	3,302	1,477	2,906	1,334
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,073	2,287	5,690	2,523	5,995	2,741
South Atlantic.....	4,057	1,800	4,163	1,820	3,643	1,605
East South Central.....	2,855	1,281	3,184	1,374	2,523	1,122
Tennessee.....	2,409	1,088	2,568	1,118	1,994	888
West South Central.....	3,491	1,573	3,427	1,535	3,759	1,536
Oklahoma.....	(D)	(D)	(D)	(D)	1,359	635
Texas.....	1,771	786	1,644	727	1,941	696
Mountain.....	3,209	1,460	3,433	1,574	2,957	1,365
Montana.....	830	369	846	382	675	308
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,146	2,344	5,321	2,409	8,248	3,759
Washington.....	1,363	599	1,450	646	1,376	600
Oregon.....	954	422	944	418	837	371
California and Hawaii.....	2,829	1,323	2,927	1,345	6,035	2,788

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

¹The following is the breakdown of geographic areas used by the Census Bureau. Northeast Region: New England Division-- Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; Middle Atlantic Division-- New York, New Jersey, and Pennsylvania. North Central Region: East North Central Division-- Ohio, Indiana, Illinois, Michigan, and Wisconsin; West North Central Division-- Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. South Region: South Atlantic Division-- Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; East South Central Division-- Kentucky, Tennessee, Alabama, and Mississippi; West South Central Division-- Arkansas, Louisiana, Oklahoma and Texas. West Region: Mountain Division-- Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Nevada, and Utah; Pacific Division-- Washington, Oregon, California, Alaska, and Hawaii.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	October 1981	September 1981	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	90	361	2,646
Peru.....	14	5	101
Chile.....	20	5	139
Morocco.....	9	216	802
Egypt.....	21	58	394
Israel.....	5	-	95
Sri Lanka.....	-	-	40
Philippines.....	-	41	267
Other.....	21	36	808
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	284	724	15,538
Mexico.....	99	4	262
Jamaica.....	8	56	444
Egypt.....	-	-	8,395
Saudi Arabia.....	42	489	2,512
Other.....	135	175	3,925
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	156,902	194,148	1,345,904
Mexico.....	1,936	3,389	34,624
Venezuela.....	1,280	3,335	25,779
Colombia.....	1,455	2,393	15,312
Peru.....	5,797	1,929	29,687
Brazil.....	6,807	13,932	97,956
Chile.....	3,399	3,187	32,022
Portugal.....	1,157	2,303	19,104
U.S.S.R.....	16,832	23,966	105,074
Morocco.....	-	5,413	20,451
Egypt.....	4,522	4,778	64,351
Bangladesh.....	-	995	7,739
China (Mainland).....	30,542	31,485	232,180
Korean Republic.....	6,247	6,552	61,123
Indonesia.....	3,246	2,933	24,540
Philippines.....	3,995	2,025	26,752
Nigeria.....	3,483	2,970	35,217
Other.....	66,204	82,563	513,993

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹			Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value at port	Estimated producers' value ²	Quantity	Value
OCTOBER 1981							
Wheat flour.....	24,712	(NA)	374	3,637	3,203	1.5	(NA)
SEPTEMBER 1981							
Wheat flour.....	24,189	(NA)	1,085	15,102	13,299	4.4	(NA)

Comparison of SIC codes (domestic output), Schedule B export codes, and TSUSA import codes is shown in the annual summary report in this series for 1980, M20A(80)-13, issued April 1981.

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

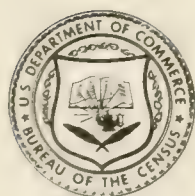
²These values were derived by use of adjustment factors to exclude freight, insurance, and other charges incurred in moving goods to the port of export. This adjustment is made to convert the values to an approximation of the producers' value of exported goods. Current adjustment factors (.8806 for industry group 204) are based on data for 1977 which are published in MC77-SR-12, Origin of Exports of Manufactured Products, appendix B.

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3.158:
M 20 A (81)-12

Flour Milling Products



U.S. Department of Commerce
BUREAU OF THE CENSUS

DECEMBER 1981

M20A(81)-12
Issued February 1982

The statistics in this publication are based on a survey of flour mills and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A descrip-

tion of the survey methodology and related information may be found in the annual summary report in this series for 1980, M20A(80)-13, issued April 1981.

Table 1. SUMMARY OF WHEAT FLOUR MILLING, NOT SEASONALLY ADJUSTED: 1979 TO 1981

Month and year	Wheat flour production, calendar month total (1,000 cwt.)	Mill feed production (tons)	Wheat ground for flour (1,000 bushels)	Daily 24-hour capacity in wheat flour ¹ (1,000 cwt.)	Wheat flour mill stocks ¹ (1,000 cwt.)
1981					
December.....	22,550	402,335	49,968	1,061	3,460
November.....	22,835	409,743	50,982	1,061	(NA)
October.....	24,712	440,419	55,552	1,061	(NA)
September.....	24,189	435,956	54,589	1,061	4,222
August.....	23,665	431,165	53,323	1,061	(NA)
July.....	23,342	410,361	51,194	1,061	(NA)
June.....	23,521	415,510	52,643	1,061	3,895
May.....	23,421	420,038	52,184	1,056	(NA)
April.....	23,967	423,747	53,402	1,056	(NA)
March.....	24,959	434,910	55,310	1,056	3,897
February.....	22,787	399,271	51,084	1,056	(NA)
January.....	25,860	420,559	57,513	1,056	(NA)
1980					
December.....	25,232	415,419	56,820	1,056	3,842
November.....	24,420	392,305	54,582	1,056	(NA)
October.....	26,285	453,219	58,392	1,056	(NA)
September.....	24,813	429,851	54,762	1,056	3,716
August.....	24,025	423,743	52,980	1,056	(NA)
July.....	23,137	409,644	51,760	1,056	(NA)
June.....	21,356	377,292	47,786	1,056	4,268
May.....	22,814	390,185	49,836	1,059	(NA)
April.....	21,231	367,709	47,170	1,059	(NA)
March.....	22,165	384,383	49,104	1,059	3,323
February.....	22,624	394,095	50,352	1,059	(NA)
January.....	24,553	429,495	54,955	1,059	(NA)
1979					
December.....	22,744	396,985	50,643	1,059	3,975
November.....	24,783	435,838	55,710	1,050	(NA)

(NA) Not available.

¹Collected quarterly.

Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call John Streeter, (301) 763-7807.

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Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	December 1981	November 1981	December 1980
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	2,675	2,748	2,474
20411 55	Straight semolina durum flour.....	M cwt.....	1,181	1,213	1,068
	Blended semolina durum flour.....	M cwt.....	(D)	(D)	(D)
	Rye:				
00119 51	Rye ground for flour.....	M bu.....	309	273	313
20416 11	Rye flour production.....	M cwt.....	137	127	143
20416 18	Rye millfeed production.....	Tons.....	1,394	1,275	1,524
20416 11	Rye flour stocks ¹	M cwt.....	13	(NA)	12
	24 hour capacity.....	M cwt.....	9	9	10

Note: These data exclude flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATE

Geographic area ¹	December 1981		November 1981		December 1980	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 cwt.)	(1,000 bushels)	(1,000 bushels)
United States.....	49,968	22,550	50,982	22,835	56,820	25,232
Middle Atlantic.....	7,085	3,164	6,951	3,133	7,306	3,293
New York.....	5,540	2,480	5,180	2,350	5,764	2,602
North Central.....	24,055	11,095	25,274	11,244	27,321	12,058
Ohio.....	2,493	1,093	2,955	1,298	2,802	1,223
Indiana.....	1,545	677	1,495	653	1,528	663
Illinois.....	2,967	1,316	3,153	1,392	3,178	1,395
Michigan.....	692	519	943	412	816	362
Minnesota.....	5,468	2,461	5,283	2,372	6,082	2,763
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	2,617	1,190	2,833	1,278	2,754	1,272
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,131	2,292	5,058	2,268	6,339	2,911
South Atlantic.....	3,978	1,755	4,056	1,800	4,097	1,784
East South Central.....	3,157	1,267	2,855	1,281	2,709	1,215
Tennessee.....	2,530	1,019	2,409	1,088	2,139	941
West South Central.....	3,671	1,631	3,491	1,573	3,479	1,534
Oklahoma.....	(D)	(D)	(D)	(D)	1,534	715
Texas.....	1,741	788	1,771	786	1,425	587
Mountain.....	3,079	1,410	3,209	1,460	3,126	1,434
Montana.....	762	343	830	369	724	328
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,943	2,228	5,146	2,344	8,782	3,914
Washington.....	1,319	584	1,363	599	1,338	593
Oregon.....	923	405	954	422	1,019	482
California and Hawaii.....	2,701	1,243	2,829	1,323	6,425	2,859

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies. ¹Revised by 5 percent or more from previous figures.

¹The following is the breakdown of geographic areas used by the Census Bureau. Northeast Region: New England Division-- Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; Middle Atlantic Division-- New York, New Jersey, and Pennsylvania. North Central Region: East North Central Division-- Ohio, Indiana, Illinois, Michigan, and Wisconsin; West North Central Division-- Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. South Region: South Atlantic Division-- Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; East South Central Division-- Kentucky, Tennessee, Alabama, and Mississippi; West South Central Division-- Arkansas, Louisiana, Oklahoma and Texas. West Region: Mountain Division-- Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Nevada, and Utah; Pacific Division-- Washington, Oregon, California, Alaska, and Hawaii.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	November 1981	October 1981	Year-to-date
WHEAT FLOUR EXCEPT MEAL AND GROATS, FOR RELIEF OR CHARITY (1314010 and 1314030) (1,000 cwt.)			
Total.....	100	90	2,746
Peru.....	28	14	129
Chile.....	2	20	141
Morocco.....	30	9	832
Egypt.....	13	21	407
Israel.....	-	5	95
Sri Lanka.....	-	-	40
Philippines.....	7	-	274
Other.....	20	21	828
WHEAT FLOUR, WHOLLY U.S. WHEAT, NOT DONATED FOR RELIEF OR CHARITY (1314020 and 1314040) (1,000 cwt.)			
Total.....	117	284	15,655
Mexico.....	54	99	316
Jamaica.....	8	8	452
Egypt.....	-	-	8,395
Saudi Arabia.....	1	42	2,514
Other.....	62	135	3,978
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	127,495	156,902	1,473,399
Mexico.....	1,802	1,936	36,426
Venezuela.....	3,862	1,280	29,641
Colombia.....	2,170	1,455	17,483
Peru.....	1,913	5,797	31,600
Brazil.....	3,259	6,807	101,215
Chile.....	4,128	3,399	36,150
Portugal.....	1,695	1,157	20,798
U.S.S.R.....	17,955	16,832	123,029
Morocco.....	5,062	-	25,514
Egypt.....	3,913	4,522	68,265
Bangladesh.....	-	-	7,739
China (Mainland).....	18,848	30,542	251,028
Korean Republic.....	4,699	6,247	65,822
Indonesia.....	2,059	3,246	26,599
Philippines.....	2,015	3,995	28,768
Nigeria.....	4,665	3,483	39,883
Other.....	49,450	66,204	563,439

- Represents zero.

Table 5. PRODUCTION AND EXPORTS OF WHEAT FLOUR
(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Wheat flour production		Export of domestic merchandise ¹			Percent exports to manufacturers' production	
	Quantity	Value	Quantity	Value at port	Estimated producers' value ²	Quantity	Value
NOVEMBER 1981							
Wheat flour.....	22,835	(NA)	217	2,053	1,808	1.0	(NA)
OCTOBER 1981							
Wheat flour.....	24,712	(NA)	374	3,637	3,203	1.5	(NA)

Comparison of SIC codes (domestic output), Schedule B export codes, and TSUSA import codes is shown in the annual summary report in this series for 1980, M20A(80)-13, issued April 1981.

(NA) Not available.

¹Source: Bureau of the Census Report EM-546, U.S. Exports.

²These values were derived by use of adjustment factors to exclude freight, insurance, and other charges incurred in moving goods to the port of export. This adjustment is made to convert the values to an approximation of the producers' value of exported goods. Current adjustment factors (.8806 for industry group 204) are based on data for 1977 which are published in MC77-SR-12, Origin of Exports of Manufactured Products, appendix B.

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M 20 A (81) - 13

Flour Milling Products



SUMMARY FOR 1981

M20A(81)-13
Issued May 1982U.S. Department of Commerce
BUREAU OF THE CENSUS

SUMMARY OF FINDINGS

Total commercial production of wheat flour in 1981 amounted to 284 million cwt. sacks, about 1.3 million cwt. sacks above the 1980 production.

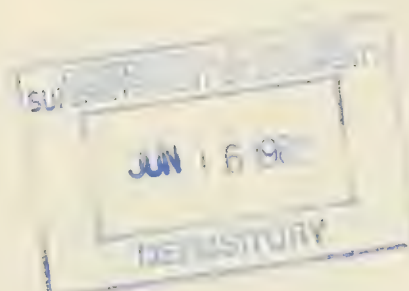
Wheat mills in 1981 and 1980 ground 634.4 and 628.6 million bushels of wheat; corresponding millfeed production

figures for these years were 5,045 and 4,866 thousand tons.

Production of rye flour in 1981 amounted to 1,563 thousand cwt. sacks, compared with 1,617 thousand cwt. in 1980. Rye grinding in 1981 and 1980 were 3,456 and 3,549 thousand bushels, respectively.

Table 1. SUMMARY: COMMERCIAL WHEAT MILLING PRODUCTION: 1972 TO 1981

Year	Wheat flour production (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Average pounds per cwt. sacks of flour	
				Wheat	Millfeed
1981.....	283,966	634,381	5,045	134.0	35.5
1980.....	282,655	628,559	4,866	133.4	34.4
1979.....	284,051	636,375	4,945	134.4	34.8
1978.....	277,950	621,321	4,860	134.1	35.0
1977.....	275,784	618,125	4,787	134.5	34.7
1976.....	275,077	618,284	4,920	135.0	35.8
1975.....	258,985	582,675	4,701	134.9	36.3
1974.....	251,097	562,962	4,483	134.5	35.7
1973.....	254,661	567,287	4,395	133.7	34.5
1972.....	250,441	557,801	4,303	133.6	34.4



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Frank Lee, (301) 763-7807.
For sale by Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price, 30 cents per copy, \$3.30 per year.

Table 2. COMMERCIAL WHEAT MILLING PRODUCTION, BY MONTH: 1981 AND 1980

Month	Wheat flour production (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Daily 24-hour capacity in wheat flour ¹ (1,000 cwt.)	Wheat flour mill stocks ¹ (1,000 cwt.)	Average pounds per cwt. sack of flour	
						Wheat	Millfeed
1981							
Total.....	283,966	634,381	5,045	(X)	(X)	134.0	35.5
January.....	24,247	53,921	421	1,056	(NA)	133.4	34.7
February.....	22,787	51,084	399	1,056	(NA)	134.5	35.0
March.....	24,959	55,310	435	1,056	3,897	133.0	34.8
April.....	23,967	53,402	424	1,056	(NA)	133.7	35.4
May.....	23,421	52,184	420	1,056	(NA)	133.7	35.9
June.....	23,521	52,643	416	1,061	3,895	134.3	35.3
July.....	23,342	51,194	410	1,061	(NA)	131.6	35.2
August.....	23,665	53,323	431	1,061	(NA)	135.2	36.4
September.....	24,189	54,589	436	1,061	4,222	135.4	36.0
October.....	24,712	55,552	440	1,061	(NA)	134.8	35.6
November.....	22,835	50,982	410	1,061	(NA)	134.0	35.9
December.....	22,321	50,197	403	1,063	3,460	134.9	36.1
1980							
Total.....	282,655	628,599	4,866	(X)	(X)	133.4	34.4
January.....	24,553	54,955	429	1,059	(NA)	134.3	34.9
February.....	22,624	50,352	394	1,059	(NA)	133.4	34.8
March.....	22,165	49,104	384	1,059	3,323	132.9	34.7
April.....	21,231	47,170	368	1,059	(NA)	133.3	34.7
May.....	22,814	49,836	390	1,059	(NA)	131.1	34.2
June.....	21,356	47,786	377	1,056	4,268	134.3	35.3
July.....	23,137	51,760	410	1,056	(NA)	134.2	35.4
August.....	24,025	52,980	424	1,056	(NA)	132.3	35.3
September.....	24,813	54,762	430	1,056	3,716	132.4	34.7
October.....	26,285	58,392	453	1,056	(NA)	133.2	34.5
November.....	24,420	54,582	392	1,056	(NA)	134.1	32.1
December.....	25,232	56,920	415	1,056	3,842	135.4	32.4

(NA) Not available. (X) Not applicable.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 3. COMMERCIAL RYE MILLING PRODUCTION, BY MONTH: 1981 AND 1980

Month	Rye flour production (1,000 cwt. sacks)	Rye ground for flour (1,000 bushels)	Millfeed production (tons)	Average pounds ground per cwt. sack of flour		Stocks of rye flour (1,000 cwt. sacks)	24-hour capacity (1,000 cwt. sacks)
				Rye	Millfeed		
1981							
Total.....	1,563	3,456	17,088	123.8	21.9	(X)	(X)
January.....	136	299	1,458	123.1	21.4	(NA)	1
February.....	122	267	1,347	122.6	22.1	(NA)	1
March.....	115	255	1,338	124.2	23.3	17	1
April.....	139	307	1,636	123.7	23.5	(NA)	1
May.....	121	277	1,416	128.2	23.4	(NA)	1
June.....	134	293	1,431	122.4	21.4	27	1
July.....	132	306	1,744	129.8	26.4	(NA)	1
August.....	122	260	1,213	119.3	19.9	(NA)	1
September.....	141	311	1,495	123.5	21.2	13	1
October.....	139	306	1,385	123.3	19.9	(NA)	1
November.....	127	273	1,275	120.4	20.1	(NA)	1
December.....	135	302	1,350	125.2	20.0	13	1
1980							
Total.....	1,617	3,549	17,674	122.9	21.9	(X)	(X)
January.....	153	351	2,011	128.5	26.3	(NA)	1
February.....	126	283	1,561	125.8	24.8	(NA)	1
March.....	125	274	1,261	122.8	20.2	22	1
April.....	114	248	1,296	121.8	22.7	(NA)	1
May.....	127	283	1,508	124.8	23.8	(NA)	1
June.....	118	262	1,231	124.3	20.9	12	1
July.....	140	306	1,367	122.4	19.5	(NA)	1
August.....	125	273	1,310	122.3	21.0	(NA)	1
September.....	143	309	1,431	121.0	20.0	11	1
October.....	148	326	1,591	123.4	21.5	(NA)	1
November.....	155	321	1,583	116.0	20.4	(NA)	1
December.....	143	313	1,524	122.6	21.3	12	1

(NA) Not available. (X) Not applicable.

Table 4. COMMERCIAL WHEAT MILLING PRODUCTION, BY GEOGRAPHIC AREA: 1981 AND 1980

Geographic areas	1981			1980		
	Wheat ground for flour (1,000 bushels)	Wheat flour production		Wheat ground for flour (1,000 bushels)	Wheat flour production	
		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)
United States.....	634,381	283,966	1,062,950	628,599	282,655	1,059,643
Middle Atlantic Division.....	82,846	37,571	132,628	82,320	37,285	143,430
New York.....	63,489	28,961	102,034	64,603	29,080	114,774
North Central Division.....	326,138	145,539	565,199	322,412	144,570	559,288
Ohio.....	34,607	15,369	62,745	35,146	15,523	62,368
Indiana.....	18,182	7,841	29,821	16,605	7,234	33,355
Illinois.....	39,738	17,432	62,514	36,902	16,342	61,418
Michigan.....	10,834	4,741	23,109	9,894	4,285	22,249
Minnesota.....	69,065	31,172	126,860	72,971	33,096	126,234
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	33,154	15,055	59,976	37,880	17,364	59,904
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	74,272	33,476	124,824	72,210	32,785	118,755
South Atlantic Division.....	48,363	21,251	82,541	44,429	19,559	79,574
East South Central Division.....	32,868	14,393	51,951	30,835	13,639	51,583
Tennessee.....	25,923	11,433	40,480	23,861	10,550	40,112
West South Central Division.....	46,849	21,086	69,685	44,058	19,648	68,906
Oklahoma.....	(D)	(D)	(D)	18,183	8,464	29,113
Texas.....	22,067	9,782	28,800	19,138	8,182	27,815
Mountain Division.....	35,307	16,135	64,547	34,254	15,875	60,195
Montana.....	8,283	3,759	13,736	7,926	3,669	13,736
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific Division.....	62,010	27,991	96,399	70,291	32,079	96,667
Washington.....	16,209	7,233	28,735	17,289	7,737	28,735
Oregon.....	12,638	5,331	19,900	11,395	5,180	19,900
California and Hawaii.....	33,163	15,427	47,764	41,607	19,162	48,032

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosing figures for individual companies.

¹Capacity as reported for December of each year.Table 5. PRODUCTION AND MILL STOCKS OF WHEAT FLOUR, BY QUARTER:
1981 AND 1980

(Figures in 1,000 cwt. sacks)		
Quarter	Production	Mill stocks
1981		
First quarter.....	71,993	3,897
Second quarter.....	70,909	3,895
Third quarter.....	71,196	4,222
Fourth quarter.....	69,868	3,460
1980		
First quarter.....	69,342	3,323
Second quarter.....	64,401	4,268
Third quarter.....	71,975	3,716
Fourth quarter.....	75,937	3,842

Table 6. DURUM WHEAT PRODUCTS: 1981 AND 1980

Item	1981		1980	
	Jan. 1- June 30	July 1- Dec. 31	Jan. 1- June 30	July 1- Dec. 31
Durum wheat ground (1,000 bushels).....	14,985	16,435	17,435	16,047
Straight semolina and durum flour produced (1,000 cwt. sacks).....	6,309	7,155	7,759	6,961
Blended semolina and durum flour produced (1,000 cwt. sacks).....	(D)	(D)	(D)	(D)

(D) Withheld to avoid disclosing figures for individual companies.

Table 7. PRODUCTION AND EXPORTS OF WHEAT FLOUR

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product code	Product	Wheat flour production		Export of domestic merchandise ¹			Percent exports to manufacturers' production	
		Quantity	Value	Quantity	Value at port	Estimated producers' value ²	Quantity	Value
20411 --	1980 Wheat flour.....	283,966	(NA)	18,807	228,521	201,236	6.6	(NA)
	1981 Wheat flour.....	282,655	(NA)	17,377	210,902	185,720	6.1	(NA)

Comparison of SIC codes (domestic output) and Schedule B export codes is as follows:

<u>Domestic output</u>	<u>Export</u>
20411-Wheat flour	131.4010-131.4040

(NA) Not available.

¹Source: Bureau of the Census report EM-546, U.S. Exports.

²These values were derived by use of adjustment factors to exclude freight, insurance, and other charges incurred in moving goods to the port of export. This adjustment is made to convert the values to an approximation of the producers' value of exported goods. Current adjustment factor (0.8806 for industry group 204) is based on data for 1980 which are published in M80(AS)-6, Origin of Exports of Manufactured Products.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers all firms in the United States operating wheat and rye flour mills.

Survey Methodology—The statistics shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products, from a sample of approximately 165 establishments representing 98 percent of total production of flour in the United States. The universe for this survey is the 1977 Census of Manufactures. The monthly sample was selected to include all establishments with a daily capacity of over 400 sacks of flour. Data for approximately 200 smaller establishments (generally those with less than five employees for which 1977 Census of Manufactures data were derived from administrative records of other government agencies) are estimated based on the month-to-month trends for reporting establishments.

Survey Error—Figures for the current month may include estimates for panel members for which reports were not received in time for tabulation. Such missing figures are "imputed" based on month-to-month movements shown by reporting firms. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is not precisely known, but it is assumed to be small. The degree of uncertainty regarding the accuracy of the published data, however, increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

Revisions to Previous Period Data—Statistics for previous months may be revised as the result of corrected data from respondents, including the receipt of late reports for which imputations were made as described above. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—The data are adjusted for the number of working days in the reporting period to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods. Since the calendar month accounting system prevails in this industry, adjustments have been made to those reporting on other than a calendar month basis.

EXPLANATION OF TERMS

Wheat Ground for Flour—Represents the purchased weight of wheat ground, including the weight of foreign material (dockage). Includes the milling of Canadian wheat in bond. Measured in bushels of 60 pounds.

Rye Ground for Flour—Represents the purchased weight of rye ground, including the weight of foreign materials (dockage). Measured in bushels of 56 pounds.

Millfeed—Includes bran, middlings, shorts, and other milling by-products intended principally for use as feed materials.

Capacity—Represents maximum quantity of flour that can be produced in a mill in 1 day if operating for 24 hours. Includes the capacity of idle mills until the mills are reported to be destroyed, dismantled, or abandoned.

Stocks of Flour—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; on the other hand, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to the problems mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation—There are different methods of valuation for the three types of data:

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Estimated producers' values of exports have also been developed. These values more closely approximate the values reported for domestic output because they exclude freight, insurance, and other charges applied from the producing plant to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

"Direct" vs "Total" Commodity Exports and Imports—Export and import data do not include materials which are

incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage—Import and export data reflect the movement of merchandise into and out of the U.S. customs territory (the 50 States, the District of Columbia, and Puerto Rico). They do not include movements between the United States and its possessions. Domestic output (shipments) data exclude Puerto Rico and other outlying areas.

Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Estimated Low-Valued Export and Import Transactions—The import statistics include estimated value data for shipments valued under \$251, based on a 1-percent sample. Effective with the statistics for March 1979, the lower limit of the value ranges for estimating data for low-value export shipments has been raised from \$251 to \$501. For countries other than Canada, effective with the March 1979 statistics, data for shipments valued \$501-\$999 (formerly \$251-\$999) are estimated based on a 50-percent sample of such shipments. As in the past, these estimates are combined with data for shipments valued \$1,000 and over, which continue to be fully compiled. For Canada, effective with the March 1979 statistics, shipments valued \$501-\$1,999 (\$251-\$1,999 prior to March 1979) are estimated, based on a 10-percent sample and are combined with fully compiled data for shipments valued \$2,000 and over. For exports to all countries, data for shipments valued under \$501 (under \$251 prior to March 1979) are also estimated, based on established percentages of individual country totals.

Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when

intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

RELATED REPORTS

A monthly Current Industrial Report also is published in this series. This annual report summarizes monthly figures and incorporates known revisions in the series for both current and previous year. It also provides a single reference copy to replace the monthly publications.

The Bureau of the Census publishes the following related reports:

Series	Frequency	Title
<i>Other Industry Reports</i>		
M3-1	Monthly	<i>Manufacturers' Shipments, Inventories, and Orders</i>
(AS)	Annually	<i>Annual Survey of Manufactures (ASM)</i>
(MC)	Quinquennially	<i>Census of Manufactures</i>

Foreign Trade Reports

FT-410	Monthly	<i>U.S. Exports—Schedule E—Commodity by Country</i>
FT-135	Monthly	<i>U.S. General Imports—Schedule A—Commodity by Country</i>

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